ALASKA EMS GOALS

A Guide for Developing Alaska's Emergency Medical Services System

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Frank H. Murkowski
Governor
State of Alaska

April, 2003

Sixth Edition

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Using this Planning Guide

Alaska EMS Goals creates an image of how the EMS system in Alaska should be now and in the near future. This image is developed in the guide's eight sections.

SECTION 100 – INTRODUCTION

- Scan **Section 110 –Purpose of the EMS Goals** to find out why this guide was developed.
- Learn more about **Alaska's EMS Strategic Plan** in **Section 120**
- Explore **Section 130 – Description of Alaska** to discover some of the unique factors that make system planning challenging in Alaska.
- Examine **Section 140 – Alaska's EMS Regions and Subareas** to see the areas this guide covers.
- Review **Section 150 – Acknowledgements** to find out who developed this guide.

SECTION 200 – ALASKA'S EMS NEEDS

- Examine **Section 220 – The Challenges** to learn more about the current and future direction.
- Look at **Section 230 – Alaska's Data** to see what information is available to evaluate the EMS system's progress.

SECTION 300 – EMS ORGANIZATIONS

- Review **Section 310 – EMS Administration, Section 320 – Emergency Medical Services, Section 330 – EMS Facilities, Section 340 – EMS Training, and Section 350 – Support Services, Section 360 – Critical Access Hospitals/Rural Health Network, Section 365 – Critical Incident Stress Management Teams** to learn what the roles of the various agencies that compose Alaska's EMS system are.

SECTION 400 – PLANNING FRAMEWORK

- Read **Section 410 – Levels-of-Community Concept, Section 420 – Federal EMS Planning Model, Section 430 – Alaska EMS System, and Section 440 – Prehospital/Hospital/Post-Hospital Index** to learn about the two planning concepts used in this document to plan for Alaska's EMS system and Section 450 to learn about Basic Community EMS Planning.

SECTION 500 – SPECIAL SYSTEM TOPICS

- Review **Section 510 – Air Medical Transportation, 520 – Communications, 530 – Hazardous Materials, 540 – Seasonal Impacts, 550 – Quality Assurance and Continuous Quality Improvement, 560 – Injury Prevention and Control, Section 570 – EMS for Children, Section 580 – Trauma Care System, and Section 590 – Trauma Registry** to learn more about these cutting-edge subjects.

SECTION 600 – COMMUNITY RECOMMENDATIONS

- Read this section to find recommendations for all community types. The recommendations are organized in the framework described in **Section 400**. The subsections are color-coded (see **Table of Contents**).

SECTION 700 – APPENDICES

- Look in **Section 710 – Glossary** to find definitions for EMS terms, including acronyms.
- Explore **Section 720 – Resources & References** to discover sources of national and state standards and regulations, as well as federal, state and regional EMS agencies and services.
- Read **Section 730 – Recommended EMS Equipment and Supplies** to find prioritized recommendations on what items other EMS workers find most useful.

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SECTION 100 INTRODUCTION

OVERVIEW

This section provides general information about Alaska and the scope, organization, and development of this planning guide. This section is organized in four sub-sections.

- **Section 110** explains **This Guide's Purpose**.
- **Section 120** describes the status of the current **Strategic Plan**.
- **Section 140** shows **Alaska's EMS Regions and Subareas**.
- **Section 150** acknowledges those involved in the development of this guide.

110 Purpose of the EMS Goals

This guide is designed to help implement the mission and overall goal of the Alaska EMS program with topic-specific goals based on the national EMS planning components. It is intended for use at all levels: national; state; and local to enhance the EMS system in Alaska. The guide should be used in conjunction with other documents as part of a total strategy to assessing and improving EMS. The Section of Community Health and EMS maintains a large number of documents on its web site that can be of assistance in planning, delivery and evaluation of emergency medical services. The web site is located at: http://www.chems.alaska.gov. A copy of this Goals Document is maintained on the site.

111 Mission

The mission of the Alaska Emergency Medical Services System is to reduce premature death and disability due to injuries and sudden illness through prevention activities and comprehensive emergency medical care.

112 Goal

The overall goal of the Emergency Medical Services program is to prevent life-threatening and disabling injuries whenever possible, and to establish a comprehensive, coordinated system of emergency medical services that:

- Assures citizens and visitors easy access to services;
- Provides an injury prevention component;
- Expedites initial response;
- Ensures appropriate lifesaving and stabilization measures rendered at the scene; and
- Ensures transport or transfer of patients in a timely and efficient manner to facilities capable of effecting maximum recovery and rehabilitation.

113 DHSS Vision

Former Commissioner Karen Perdue, working with Deputy Commissioners and Division Directors, created a vision of how the Department should be operated given the changes to the social service system precipitated by 1995 U.S. Congressional action. The elements of this vision include:

1. **Customer Driven**: Customers are usually the experts regarding their health. If the responsibility for health is shared with them, we will respond to their ideas regarding their needs.
2. **Collaborative System**: If local governments, consumers, advocates, service providers, business, and departments work together, we can create ownership and trust.
3. **Programs Focused on Self-Sufficiency**: Programs that help people help themselves promote self-sufficiency, are more respectful of individuals and families, and invest in long-term, sustainable health and well-being of Alaskans.
4. **Local Ownership**: Local communities know their needs best, especially in Alaska where communities offer a diverse array of cultures, climates, and lifestyles. Communities and families offer strength and resources towards meeting the challenges they face.
5. **Effective, Efficient Management System**: Staff at all levels needs the tools and authority to be creative and responsive in serving Alaskans. Effective management produces productive employees who have a stake in the success of the organization.

6. **Quality Work Force**: A skilled and committed work force is essential to do our job.
7. **Outcome-Based Effective Services**: Designing programs to assess whether services are addressing real needs is essential to maintaining morale and to know that a difference is being made in people's lives.

These seven characteristics are an intrinsic part of Alaska's Emergency Medical Services system.

114 State, Regional and Local Planning

By implementing these mission and goal statements, *Alaska EMS Goals* directs the State EMS Office in administering state laws and the statewide EMS system. In addition, the guide leads regional and local policymakers in developing and expanding regional and local programs. It is used in the annual review of proposals for awarding state grants. ACEMS and the Department of Health and Social Services set annual priorities (see **Section 223**), and requests to fund projects within these prioritized areas will receive higher scores than those addressing lower priorities. Since state, regional, and local EMS programs have finite financial resources to deal with today's challenging issues, *Alaska EMS Goals* provides policymakers with a basis for deciding how to allocate scarce resources in developing Alaska's developing EMS system.

115 Community Involvement

Alaska EMS Goals is meant to be more than a road map of how we get from here to there. This guide provides a set of goals to assist local and regional emergency medical service providers and policy makers in their planning. Its intention is to precipitate a process by which interested people, from program administrator to medical director to trainer to volunteer EMT to private citizen, constructively share their ideas, knowledge, and information to create a whole that achieves more than the sum of the parts. This process involves effective communication, negotiation, and cooperation. *Alaska EMS Goals* is a catalyst for the process of improving Alaska's EMS system. See Section 450, Basic Community Planning, for more information.

120 Strategic Plan

The EMS Unit within the Section of Community Health and EMS maintains a current strategic plan. The plan can be found on the section's web site and as an appendix to this document.

140 EMS Regions and Subareas

From an EMS perspective, Alaska consists of seven regions that receive all or some of their funding from the State of Alaska. Three of these regions are further divided into subareas. **Map 140-1** shows the regions. **Map 140-2** shows the subareas. Organized boroughs and Native health service areas may be subareas.

Regional EMS Offices include:

Interior Region EMS Council, Inc.
Southern Region EMS Council, Inc.
Southeast Region EMS Council, Inc.
Norton Sound Health Corporation EMS Program
Maniilaq Association EMS Program
North Slope Borough EMS Program
Yukon-Kuskokwim EMS Program

Although a popular adage says that one picture is worth a thousand words, there are several elements that a map of Alaska does not communicate. Alaska's unusual geographic, demographic, and economic characteristics dramatically impact EMS delivery and the development of a systems approach. National standards for response times, vehicle placement, and staffing patterns of emergency facilities cannot feasibly be met in most rural areas of the state.

ALASKA EMS REGIONS & SUBAREAS

INTERIOR REGION
- Fairbanks North Star Borough
- Tok Subarea

NORTHWEST ARCTIC BOROUGH REGION

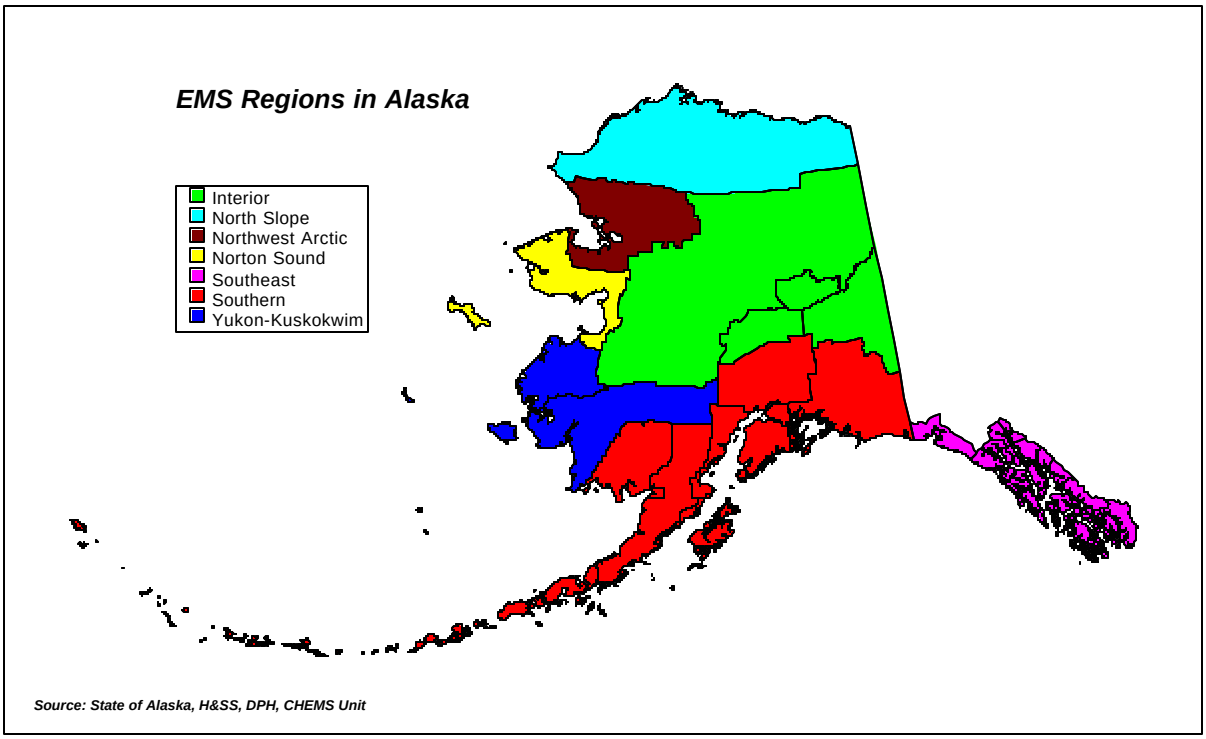
NORTH SLOPE BOROUGH REGION

NORTON SOUND REGION

SOUTHEAST REGION
- Annette Island
- Prince of Wales Island

SOUTHERN REGION
- Kenai Peninsula
- Matanuska-Susitna
- Anchorage & Cook Inlet
- Copper River
- Prince William Sound
- Kodiak
- Aleutian/Pribilof West & East Islands
- Bristol Bay

YUKON KUSKOKWIM REGION



150 Acknowledgements

This guide is a synthesis of ideas and approaches based on experiences in local, regional, and statewide EMS systems. The original 1981 version of the guide was developed with the help of many Alaskans. The first revision (1984), the second revision (1993), and the third revision (1996) reflect the experiences of the many who have used the guide in the decade and a half since its inception. The Section of Community Health and EMS gratefully acknowledges the efforts of Linda Van Houten, who compiled and edited the 1996 version of the document, Zoann Murphy, who edited subsequent versions and donated considerable time to preparing the document for electronic publishing, and the many current and former members of Regional EMS Offices and the Alaska Council on Emergency Medical Services who contributed their time and expertise.

The process for the 2002 revision was funded primarily by the Rural Hospital Flexibility Program.

SECTION 200
EMS NEEDS IN ALASKA

OVERVIEW

This section defines Alaska's more prominent EMS needs and priorities. The section contains two sub-sections.

- **Section 220** discusses the n**ational** and **state priorities** related to EMS.
- **Section 230** reviews the available **state data**, showing the **EMS program's effectiveness**.

The most recent ***EMS Annual Report***, which is available from the State EMS Office at the beginning of each year, details the activities and accomplishments of the statewide Emergency Medical Services program during the past year.

The Challenges

This area is divided into three parts:

- **221 National Health Objectives**
- **222 State Objectives**
- **223 Priorities of the Alaska Council on EMS**

221 National Health Objectives

Healthy People 2010: National Health Promotion and Disease Prevention Objectives contains the elements of a national health perspective. The focus of this outlook is prevention of unnecessary disease, injury, and disability to achieve a better quality of life for all Americans. It grew out of a health strategy initiated in 1979 with the publication of *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention* and expanded with the 1980 publication of *Promoting Health/Prevention of Disease: Objectives for the Nation*, which set out an agenda for the ten years leading up to 1990 and again for 2000.

The purpose of *Healthy People 2000*, and now, Healthy People 2010,is to offer a vision for the new century, characterized by significant reductions in preventable death and disability, enhanced quality of life, and reduced disparities in the health status of populations within our society. It is the product of a national effort, involving professionals and citizens, private organizations and public agencies from every part of the country.

Many objectives in *Healthy People 2010* relate to emergency medical services and injury prevention. The *Alaska Injury Prevention Plan* discusses some of the objectives as well.

222 State Objectives

222.1 Emergency Medical Services Priorities

Despite the accomplishments made in the last three decades, Alaska still has several goals to meet. In the near future, we hope to be able to say, as described in the overall goal of the EMS program, that Alaska has a comprehensive, coordinated system of emergency medical services that:

- Assures citizens and visitors easy access to services;
- Provides an injury prevention component;
- Expedites initial response;
- Ensures appropriate lifesaving and stabilization measures rendered at the scene; and
- Ensures transport or transfer of patients in a timely and efficient manner to facilities capable of effecting maximum recovery and rehabilitation.

Also, a greater emphasis on injury prevention and appropriate evaluation mechanisms should be in place to help determine which prevention strategies are effective.

223 State EMS Priorities

Each year the Alaska Council on Emergency Medical Services (ACEMS), in conjunction with the Section of Community Health and EMS, sets priority areas for EMS grant applicants. The applicants emphasize these areas in their program planning.

Current priorities are listed here.

1. maintenance of current programs and services;
2. revitalize current EMS services through the retention, recruitment and training of volunteers;
3. and continue to increase the availability of essential emergency medical equipment in Alaska.

The annual priorities are used for developing grants and contracts, and for advocating for improvements in the Alaska EMS system. The annual priorities are posted on the CHEMS web site.

230 Alaska's Data

Data assists program evaluation. State vital statistics cause of death data helps show how well we did in achieving the previous objectives. State ambulance run reports and the Alaska Trauma Registry are data sources providing relevant information about serious injuries.

This area is divided into four parts, specifically:

- **231 Vital Statistics**
- **232 Ambulance Run Data**
- **233 Trauma Registry**
- **234 Other Sources**

231 Vital Statistics

The Alaska Bureau of Vital Statistics is responsible for managing vital records in the State of Alaska. Vital records in Alaska include birth, death, fetal death, divorce and marriage certificate data, along with reports of adoption. It is a significant source of data that can be used to target injury prevent programs and other EMS activities.

232 Ambulance Run Data

In Alaska, a variety of run reports are used to record prehospital patient care. **Section 740** contains sample record forms (which are available from the State EMS Office) as well as a list of essential uniform prehospital EMS data elements from which services can develop a form.

The Section of Community Health and EMS is implementing a statewide EMS data collection system. It will give state and local agencies an opportunity to:

- advocate more effectively for funding;
- modify training programs to meet the needs of the EMS system;
- identify and anticipate trends in patient care so the emergency medical services system can grow in a resource efficient manner;
- allow research and introspection that will improve emergency patient care and focus injury prevention activities;
- facilitate comparison of data with other systems.

In addition, most of the newer software has very well developed billing capabilities which can significantly enhance the revenue collection necessary to sustain many services.

Activities which have, or will be, undertaken by the Section of Community Health and EMS include:

- Enhancing the model State EMS Prehospital Run Report Form;
- Developing and/or adopting a standardized record format for accepting electronic data (based on the National Highway Traffic Safety Administration Data Set;
- Making the input data format available to EMS agencies and software vendors;
- Developing computer database capabilities to accept electronic data from patient care reports sent by participating services via modem (dialup and internet);
- Finding ways to help fund some start up costs for electronic record keeping.
- Develop the capability to provide services involved in the statewide data collection program with timely and meaningful reports.

More information about this important project can be found on the Section's web site. The key to the selection of software at the local level is its compliance with the National Highway Traffic Safety Administration's essential data set.

233 Trauma Registry

The Alaska Trauma Registry is an injury surveillance system of the most seriously injured patients and the treatment they have received. The purpose of the registry is to evaluate the quality of trauma care and the Emergency Medical Services system, and to determine the causes and severity of injuries and the impact of injury prevention programs. (See **Section 590** for additional information on the Alaska Trauma Registry.)

SECTION 300 ALASKA'S EMS ORGANIZATIONS

OVERVIEW

This section describes the numerous organizations that compose the Alaska EMS network and is organized in the following sub-sections.

- Agencies that provide **administrative functions** are described in **Section 310**.
- **Section 320** describes those **agencies** providing **emergency medical services**.
- **Section 330** describes **facilities** used for the provision of **emergency medical services**.
- **EMS training and certification** are explained in **Section 340**.
- **Section 350** highlights those agencies with **services augmenting or supporting emergency medical services**.
- **Section 360** describes the Critical Access Hospitals and Rural Health Networks in the state.
- **Section 365** describes the contributions made by **Critical Incident Stress Management Teams in Alaska.**

For more details on these agencies, refer to the current issue of the *Alaska Emergency Medical Services Directory*, available from the State EMS Office.

310 EMS Administration

This area is divided into six parts, specifically:

- **311 State EMS Unit**
- **312 Alaska Council on EMS**
- **313 Regional and Subarea EMS Programs**
- **314 Local EMS Councils**
- **315 EMS Medical Direction**
- **316 Federal Agencies**

311 State EMS Unit

The lead agency for the development of the statewide emergency medical services (EMS) system in Alaska is the Emergency Medical Services Unit, within the Section of Community Health and EMS, Division of Public Health, Department of Health and Social Services (DHSS), also referred to as the State EMS Office. The staff consists of program administrators and clerical support and is based in Juneau with several Injury Prevention Specialists based in Anchorage.

The Alaska Legislature placed EMS responsibilities in DHSS in 1977 by passing *Alaska Statute 18.08.010*. This law designated DHSS as the agency responsible for EMS systems development in Alaska; established an eleven-member Alaska Council on EMS appointed by the Governor, and gave DHSS authority to award EMS systems development grants. In 1978, the Legislature passed *Alaska Statute 18.08.080* which gave DHSS the authority to adopt regulations. In 1993, the statute was amended to include trauma care system development. Current regulations encompass:

- Certification of Emergency Medical Technicians (EMTs) and EMT Instructors (*7 AAC 26.010 – 7 AAC 26.170*);
- Mobile Intensive Care Paramedic Training Courses (7 AAC 26.172 – 7 AAC 26.180)
- Emergency Medical Services Outside Hospitals (*7 AAC 26.210 – 7 AAC 26.290*);
- Medevac Services, Critical Care Air Ambulance Services, and Specialty Aeromedical Transport Teams (*7 AAC 26.310 – 7 AAC 26.400*);
- Emergency Trauma Technician Instructors and Approved Emergency Trauma Technician training courses (*7 AAC 26.410 – 7 AAC 26.490*);
- Defibrillator Technicians and Approved training courses (*7 AAC 26.510 – 7 AAC 26.590*);
- Approved Automated External Defibrillator Training Programs (7 AAC 26.580)
- Responsibilities of Medical Directors (*7 AAC 26.610 – 7 AAC 26.700*);
- Trauma Centers and Trauma Registry (*7 AAC 26.710 – 7 AAC 26.745*);
- Emergency Medical Dispatchers (*7 AAC 26.810 – 7 AAC 26.840*); and

- CPR Certification and Training (7 AAC 26.985)

In addition, the EMS Office helps implement the Alaska Comfort One Do-Not-Resuscitate program and the program for providing hepatitis B vaccine to eligible volunteer emergency medical and rescue personnel.

All facets of the EMS Program have been developed with assistance and consultation from the Governors' Alaska Council on EMS, also known as ACEMS (see **Section 312**). The EMS Unit also receives medical direction from a physician on contract, the State EMS Medical Director (see **Section 315**).

Coordination is another principal function of the EMS Unit. It coordinates federal, state and regional, and paid and volunteer agencies involved in Alaska's EMS system. By providing grants and overall program direction, it works through regional EMS councils, non-profit health corporations, and borough governments to coordinate air and ground ambulance agencies and other prehospital care with hospital care, Native health corporations, and other related organizations.

In addition to the coordination, certification, and grants administration roles, the Unit also:

- Recommends appropriate EMS standards for Alaska;
- Provides overall medical direction for statewide EMS systems development;
- Certifies personnel and services according to legislative mandates to assure minimum standards of emergency medical care;
- Provides and administers operating and capital grants to EMS regions, and provides assistance for regional EMS systems development;
- Provides technical assistance to regional and local EMS agencies;
- Educates the public on injury prevention, appropriate action in emergencies, and emergency procedures;
- Seeks injury prevention measures and improved emergency medical services through legislative action;
- Assists in development of EMS aspects of statewide disaster planning;
- Monitors and evaluates continued EMS systems development throughout the state;
- Collects and analyzes data from ambulances and hospitals on traumatic injuries, and maintains a trauma registry;
- Assists in development of improved statewide capabilities to provide emergency medical services for children; and
- Plans and prioritizes continued program development based on systematic needs assessments and epidemiologic research.

312 Alaska Council on EMS

The Alaska Council on Emergency Medical Services (ACEMS) is a body of eleven members appointed by the Governor to advise the Department of Health and Social Services on the overall development of a statewide, comprehensive emergency medical services system. Council members are appointed for four-year terms. Three members must be consumers representing three of the four judicial districts, and the remaining eight include: two who are physicians with experience in emergency medicine or trauma care; one registered nurse with emergency nurse experience; three prehospital emergency care providers; one EMS administrator; and one hospital or Native health care administrator. The Council meets two times each year and additional meetings are occasionally scheduled by teleconference, as needed. Liaison representatives include: the State EMS Medical Director; the Alaska Area Native Health Service's Director; a Highway Safety Planning Agency representative from the Department of Public Safety; a representative from the Division of Emergency Services in the Department of Military and Veterans Affairs; a representative from the Alaska Chapter, American College of Surgeons, Committee on Trauma; and a representative from the Alaska Air National Guard.

The Council's purpose, as explained in *Alaska Statute 18.08.020*, is to:

- Advise the DHSS Commissioner and Governor about planning and implementation of a statewide EMS system; and
- Perform other functions to be prescribed from time to time by applicable state statute or functions that are lawfully prescribed by the Governor of the State or the Commissioner of Health and Social Services.

The Council provides other functions as well. ACEMS:

- Brings together technical resources, experience, and knowledge to assist and advise on the development of the EMS system in Alaska;
- Advises the State EMS staff and EMS regional directors regarding public education and generation of broad community support for the goals of the EMS program;
- Recommends EMS program policy; and
- Reviews EMS or EMS-related program proposals on request of the Governor, Commissioner of the Department of Health and Social Services, the Director of the Division of Public Health, or EMS Unit staff.

313 Regional and Subarea EMS Programs

Every year regional EMS councils, regional Native health organizations, and some large boroughs submit grant applications to the State EMS Unit for funding for the upcoming fiscal year. Currently, there are seven EMS regions funded by the state, including the North Slope Borough, Northwest Arctic Borough (Maniilaq Association), Norton Sound Health Corporation, Yukon-Kuskokwim Health Corporation, Interior Region EMS Council, Inc., Southern Region EMS Council, Inc., and Southeast Region EMS Council, Inc. Three of these regions have subarea programs. Subarea programs coordinate EMS activities and, in some cases, receive partial funding from the State through their respective regional program. The Interior Region has the Fairbanks North Star Borough Subarea. Southern Region has eight subareas: Aleutian/Pribilofs, Anchorage and Cook Inlet, Bristol Bay, Copper River, Kenai Peninsula, Kodiak, Matanuska-Susitna, and Prince William Sound.

All of the regional programs maintain full-time staffs that include administrators, clerical support and EMS coordinators. Nearly all have EMS Instructors on staff.

A primary function of the regional and subarea programs is to coordinate EMS activities in their areas. They also:

- Facilitate the development and maintenance of local and regional emergency medical services to provide a continuum of patient care;
- Coordinate with regional, subarea, and local paid and volunteer agencies involved in EMS;
- Assist local emergency medical services and facilities to meet recommended standards and regulations of the statewide EMS program;
- Provide technical assistance and medical consultation to regional and local EMS agencies and medical facilities;
- Administer funds granted by the Department of Health and Social Services , as well as income derived from other sources;
- Review community requests for State EMS funds and develop priorities for EMS funding;
- Coordinate and provide training of EMS personnel within the region and improve statewide training through participation on the State EMS Training Committee;
- Assist in developing and sponsoring continuing education programs for nurses, mid-level practitioners, and physicians;
- Educate the public on injury prevention, appropriate action in emergencies, and emergency preparedness;
- Monitor and evaluate regional EMS development;
- Develop strategies, recommendations and priorities for the Alaska Code Blue project;
- Plan and prioritize continued regional program development based on systematic needs assessment; and
- Assist in development of EMS aspects of disaster planning.

313.1 Borough Governments

Some of the regional and subarea programs are part of a borough government. The Fairbanks North Star Borough, the North Slope Borough, the Matanuska-Susitna Borough, Kenai Peninsula, and the Municipality of Anchorage all have EMS programs, as do most other smaller boroughs in the state. The role of some borough governments in reference to emergency medical services may include:

- Adopting the provision of emergency medical services as a borough responsibility;

- Establishing, by ordinance, an EMS Council to coordinate the delivery of emergency medical services and to advise the Borough administration and assembly on EMS system needs (the Council may include representatives from each of the agencies in the Borough involved in the direct provision of emergency medical patient care, with one or more representatives of the council serving as liaison with regional and state EMS agencies);
- Providing staff and funding support adequate to meet the administrative, training, communications, and equipment needs of EMS services within the borough;
- Contracting with existing EMS-related organization and city governments to provide an approved standard of emergency care, with technical or funding assistance as appropriate;
- Coordinating EMS training, continuing medical education, and state certification for Borough EMS services;
- Coordinating acquisition of EMS equipment and supplies;
- Providing area wide EMS communications and dispatch;
- Establishing a central billing and collection system for each of the prehospital EMS services within the borough;
- Adopting a long-range borough EMS plan;
- Establishing a Medical Advisory Board or designating an EMS Medical Director to approve standing orders, assist with training, and conduct EMS run reviews;
- Developing a public information/education system, including information on accessing the system, training in CPR and first aid, and injury prevention; and
- Planning and implementing a first responder system to ensure quick EMS response to emergencies occurring long distances from ambulance bases.

313.3 Native Regional Health Corporations

Twelve non-profit Alaska Native Regional Health Corporations, corresponding to the for-profit Native regional corporations created by the Alaska Native Claims Settlement Act in 1971, provide the majority of direct health services in many rural parts of the state. Under *Public Law 93-638*, the Indian Self-Determination and Education Assistance Act, these Native Regional Health Corporations are able to contract with the Indian Health Service (IHS) to plan and administer the delivery of health services in their respective areas. Under the authorities granted and funds appropriated through *PL 93-638*, many of the activities and services provided by the Alaska Area Native Health Service gradually are being assumed by the Native Regional Health Corporations, and in many cases by individual Native villages and communities. Contracts or grants with the Department of Health and Social Services also provide for basic services, including EMS.

Beginning in the early 1990's, Native organizations assumed more local control of financial resources related to health care. This "compacting," decentralized some of the activities related to EMS that had been performed by the Indian Health Service.

Regional Native health corporation and native villages and communities offer different mixes of health care and EMS services, personnel, and facilities. Many employ village community health aides and provide a wide variety of resources and programs, which include emergency medical services and injury prevention programs. There are over 140 village clinics staffed by community health aides providing primary emergency care, as well as screening and medical care for minor problems. Former IHS hospitals in Sitka, Kotzebue, Dillingham, and Bethel are now operated by these corporations, as are major clinics in Juneau, Ketchikan, Fairbanks, and Kodiak. Regional health corporations provide health planning and community development services as well.

314 Local EMS Councils

Some communities with active emergency medical services agencies have formed local EMS councils. These councils serve the community by providing a means of resource sharing and coordination, bulk purchasing power, and developing mutual aid agreements. Disaster planning and response can be significantly improved by including local councils since most disasters require multi-agency action.

315 EMS Medical Directors

The Alaska EMS system has several types of medical direction. There is a state-funded contract for medical direction, as well as a federally-funded Alaska Area Native Health Service medical director. There are regional medical directors and local medical directors. The regional and local medical directors are primarily volunteers but some receive compensation through contracts. Medical directors have responsibility for maintaining quality prehospital care within their area. The basic roles and responsibilities of EMS medical directors are outlined in regulations (7 AAC 26.610 – 7 AAC 26.999).

315.1 State EMS System Medical Director

The State EMS System Medical Director:

- Provides overall medical direction for the State EMS program, represents the State EMS program to the medical community and acts as physician liaison in gaining support for regional programs;
- Is available for medical consultation to the EMS Unit, Division of Public Health; Director of Public Health; Alaska Council on Emergency Medical Services; and regional EMS program staff;
- Reviews specific program documents supplied by the EMS Unit that relate to the systems approach to care of the seriously injured or ill patient and makes appropriate medical recommendations to the Director of Public Health;
- Works with local and regional EMS medical directors to improve patient care through enhancement of protocols and quality improvement practices;
- Is responsible for working with medical specialists in developing and updating statewide guidelines for emergency treatment and transport of the ill or injured;
- Reviews the curriculua for ETT, EMT, Paramedic and other EMS training programs and recommends improvements to the State EMS Training Committee, a subcommittee of the Alaska Council on Emergency Medical Services;
- Reviews requests for additional medications and procedures submitted in compliance with 7 AAC 26.670;
- Reviews the EMS components of state and local disaster plans and recommends changes to the EMS Unit and to the Division of Emergency Services, Department of Military and Veterans Affairs; and
- Visits programs, attends meetings and workshops within and outside Alaska, to be determined in consultation with the Section of Community Health and Emergency Medical Services and the Alaska Council on Emergency Medical Services.

315.2 Regional EMS System Medical Directors

Regional EMS system medical directors:

- Provide overall medical direction for the regional EMS program, represent the regional EMS program to the medical community and act as physician liaisons in gaining support for local programs;
- Serve on local or regional EMS councils;
- Meet periodically with the regional EMS director or coordinator;
- Evaluate plans, priorities, and long range goals of the EMS organizations in the region;
- Reviewi planning documents and approve operating and capital budget funding requests;
- Work with medical specialists to develop region-specific guidelines for emergency treatment and transport of the ill or injured, adapted from statewide guidelines; and
- Determine priorities for training and continuing education of prehospital and hospital emergency personnel in the region.

315.3 Local EMS Medical Directors

Local Medical Directors, who must be physicians, support the backbone of Emergency Medical Services in Alaska. The responsibilities of physician medical directors are outlined in Alaska regulations (*7 ACC 26.610-.690, Article 6. Medical Directors*) regarding Emergency Medical Technicians and training programs, defibrillator technicians, ground ambulance services, air medical services, and mobile intensive care paramedics.

The responsibilities of physician medical directors often include:

- Supervision of the medical care provided by individuals and agencies under their direction;
- Establishment and review of treatment guidelines and standing orders;
- Critiques of emergency patient care, monthly run reviews, and quarterly on-site visits;
- Providing education to those under their supervision;
- Approval of continuing medical education programs; and
- Serving as liaison between EMS providers and agencies and the medical community.

315.4 Federal Alaska Area Native Health Service Medical Director

The Federal AANHS Medical Director:

- Provides overall medical direction for the Native Health Service EMS program in Alaska;
- Represents the Native Health Service EMS program to the medical community;
- Participates in ACEMS as a non-voting member;
- Works closely with the State EMS Program to coordinate priorities;
- Works closely with PHS/IHS physicians for EMS medical direction; and
- Coordinates ATLS training for physicians employed by the Indian Health Services or Native Health Corporations.

316 Federal Agencies

There are several federal agencies that are programmatically involved in emergency medical services. Some agencies conduct research, others compile statistics; others develop or provide training materials or information to assist EMS departments and providers across the country.

316.1 Department of Agriculture

316.11 Rural Development Administration, Community Facilities Division

This agency promotes economic development in rural America by financing needed community facilities, assisting business development, and developing effective national strategies for rural economic development. The agency assists rural Emergency Medical Services by providing guaranteed loans and grants for essential facilities including major equipment. This includes hospitals, clinics, EMS buildings, ambulances, CAT scanners, hydraulic tools, radio and telemetry equipment, and so on. The USDA is an active participant in the Alaska Code Blue Project and has provided the majority of funds used recently to purchase essential EMS equipment under this program.

316.2 Department of Commerce

316.21 Federal Communications Commission

In 1993 the Federal Communications Commission (FCC) adopted an order creating the Emergency Medical Radio Service (EMRS) as a Public Safety Radio Service. EMS users now are recognized by the FCC as full participants in Public Safety Radio Services and receive the same considerations as other participants. The Emergency Medical Radio Service was created after many years of frustration as a result of blocked transmissions and delays of emergency medical communications caused by overcrowding and sharing frequencies with incompatible radio users within the Special Emergency Radio Service.

316.3 Department of Defense

316.31 Office of the Deputy Assistance Secretary of Defense for Medical Readiness

This agency develops Department of Defense policy for medical disaster response through the Federal Response Plan and the National Disaster Medical System. Coordinates policy for the provision of Emergency Medical Services on Department of Defense facilities.

316.4 Department of Health and Human Services

316.41 US Public Health Service

The US Public Health Service (PHS) was established in 1798 to set up marine hospitals for the care of American merchant seamen. Subsequent legislation has vastly broadened its scope of activities. Its mission is to promote the protection and advancement of the nation's physical and mental health. The PHS is a major component of the US Department of Health and Human Services and consists of eight organizations, specifically:

- Agency for Health Care Policy and Research,
- Agency for Toxic substances and Disease Registry,
- Alcohol, Drug Abuse and Mental Health Administration,
- Centers for Disease Control and Prevention,

- Food and Drug Administration,
- Health Resources and Services Administration,
- Indian Health Service, and
- The National Institutes of Health.

The Centers for Disease Control and Prevention, the Food and Drug Administration, and the Indian Health Service have offices in Alaska.

The PHS has responsibilities in the event of a disaster and serves as the primary federal agency for coordinating Essential Support Function 8 (ESF 8 – Health and Medical Services) activities.

316.411 Centers for Disease Control and Prevention

The Centers for Disease Control and Prevention (CDC), established within the PHS in 1973, is the federal agency charged with protecting the public health of the nation by providing leadership and direction in the prevention and control of diseases and other preventable conditions and responding to public health emergencies. The CDC is headquartered in Atlanta, Georgia. It is composed of ten major components:

- Epidemiology Program Office,
- International Health Program Office,
- Public Health Practice Program Office,
- National Center for Prevention Services,
- National Center for Environmental Health,
- National Institute for Occupational Safety and Health,
- National Center for Chronic Disease Prevention and Health Promotion,
- National Center for Infectious Diseases,
- National Center for Health Statistics, and
- National Center for Injury Prevention and Control.

The National Institute for Occupational Safety and Health (see following section) opened an Anchorage office in 1991. The National Center for Infectious Diseases has an Arctic Investigations Program located in Anchorage.

The CDC is improving the public health response to bioterrorism through its grant programs. The State of Alaska has received grant funds to enhance surveillance, laboratory testing, notification of health care personnel, and public health training. More information on this important grant is found in section ____.

316.4111 National Institute for Occupational Safety and Health

The National Institute for Occupational Safety and Health (NIOSH) is responsible for conducting research to make the nation's work places healthier and safer. In 1991, the Division of Safety Research, established an office in Anchorage. The Anchorage-based staff are studying the occupational-related fatality rates by industry and collaborating with other federal and state agencies, including staff of the Alaska Trauma Registry to reduce this rate according to the PHS's *Year 2010 National Health Objectives*.

316.4121 Alaska Area Native Health Service

The Indian Health Service (IHS) provides a comprehensive health services delivery system for American Indians and Alaska Natives. The IHS's goal is to raise the health status of American Indians and Alaska Natives to the highest possible level The "compacting " of Alaska Native health care services, and the transference of ownership of IHS facilities has diminished the role of IHS in coordinating emergency medical services. However, the new Alaska Native Medical Center serves as a referral hospital for many regional Native hospitals. The Alaska Tribal Health Consortium, and hospital staff, continue to work diligently to improve emergency medical services and access to health care, throughout Alaska.

316.42 Health Resources and Services Administration

HRSA directs programs that improve the Nation's health by expanding access to comprehensive, quality health care for all Americans. Through its programs, which include HIV/AIDS Services, Primary Health Care, Maternal and Child Health, Health Professions, Special Programs and Rural Health Policy, HRSA works to improve and extend life for people living with HIV/AIDS, provide primary health care to medically underserved people, serve women and children through State programs, and train a health workforce that is both diverse and motivated to work in underserved communities. The agency has funded an EMS training grant for Alaska, the

national Rural Access to Emergency Devices Grant Program, and administers the EMS for Children program.

Within HRSA, it is the Maternal and Child Health Bureau that administers the Emergency Medical Services for Children (EMSC) program, which is designed to reduce mortality and other negative consequences of pediatric emergencies through strengthening the capacity of emergency medical systems to deal with pediatric trauma and critical illness. EMSC has been designed to be a comprehensive system encompassing injury prevention, acute care, and rehabilitation. The Bureau funds grants for states to improve their emergency medical system of care for children, focusing on issues such as injury prevention, education, financing, data collection, quality assurance, and rehabilitation. The Bureau has also funded targeted issues grants, as well as two resource centers on EMS for children.

316.43 National Center for Injury Prevention and Control, CDC

The National Center for Injury Prevention and Control serves as lead federal agency for control of non-occupational injuries. NCIPC works to reduce morbidity, disability, mortality, and costs associated with injuries. NCIPC has responsibility for developing the US Public Health Service's *Year 2010 Health Objectives for Emergency Medical Services and Trauma System* and is also responsible for development and implementation of the National Plan for Injury Prevention and Control. The NICPC research program funds and monitors research in three phases of injury control: prevention, acute care, and rehabilitation. It also provides State Injury Profiles, containing maps and tables of injury deaths and death rates in each state.

316.44 National Disaster Medical System, Office of Emergency Response, USPHS

The National Disaster Medical System serves as principal advisor to the Department of Health and Human Services' Assistant Secretary for Health for department-wide emergency preparedness matters. This agency develops, directs, coordinates, and executes departmental emergency preparedness plans, programs, and functions.

The Municipality of Anchorage has received grant funds from the OER to develop a Metropolitan Medical Response System to respond to Weapons of Mass Destruction.

316.5 Department of Transportation

316.51 National Highway Traffic Safety Administration, EMS Division

The National Highway Traffic Safety Administration (NHTSA) has many activities which support state EMS programs. NHTSA:

- Conducts research and demonstration projects;
- Distributes state-of-the-art information;
- Provides on-site technical assistance to states and national organizations;
- Develops national standard training curricula;
- Conducts national meetings and workshops on EMS issues;
- Supports the development of national consensus EMS standards;
- Serves as a liaison to national EMS/trauma organizations;
- Administers research and demonstration projects under *Section 403* of the Highway Safety Act; and
- Administers implementation of *Standard 11* of *Section 402* of the *Highway Safety Act of 1966*, which is a block grant program to the states enabling them to improve highway safety. (*Standard 11* on EMS is one of 18 program areas that the states can spend funds on. Each state, through its Governor's Highway Safety Representative, determines which of the programs will receive funding.)

316.52 United States Coast Guard

The mission of the United States Coast Guard (USCG) includes search and rescue (SAR), maritime law enforcement, aids to navigation, military readiness, and marine safety. In Alaska, the Coast Guard is responsible for about 3,854,500 square miles of water for search and rescue purposes. The Alaska operation includes 40 units based throughout the state (the majority operate on the Gulf of Alaska) and air stations in Sitka and Kodiak. Search and rescue is a principle function of the Coast Guard in Alaska.

According to the *National Contingency Plan*, the USCG is the lead federal agency for responding to oil and hazardous substance spills in U.S.

coastal waters. The *State and Regional Oil and Hazardous Substance Discharge Prevention & Contingency Plan* details the USCG's role for a spill in Alaska, and is available from the Alaska Department of Environmental Conservation at 907/465-5220.

Particularly in Southeast Alaska, the USCG facilitates emergency planning through yearly tabletop exercises which often involve emergency medical personnel. Coast Guard auxiliary personnel are involved in injury prevention activities throughout Southeast Alaska.

316.6 Department of Veterans Affairs

316.61 Emergency Medical Preparedness Office

This agency serves as primary back-up to the Department of Defense medical care system for the care of active duty personnel during a military contingency where the Department of Defense Medical Care Facilities are unable to provide care to all returning casualties. The Emergency Medical Preparedness Office develops plans to support the National Response Plan and the National Disaster Medical System.

316.7 Federal Emergency Management Agency

316.71 United States Fire Administration

The USFA conducts research, produces publications, disseminates information, and coordinates with other agencies and organizations to increase the efficiency and effectiveness of fire service management across the country. The purpose of the Emergency Medical Services program of the USFA is to address a major component of this issue – the management of prehospital emergency medical services.

316.72 National Fire Academy

The National Fire Academy presents training programs directed at improving the management of the fire service and other allied professionals. These training programs enhance the ability of emergency services to deal more effectively with fires and other emergencies. Programs are provided at the NFA campus in Emmitsburg, Maryland, and by extension programs throughout the United States.

316.73 State and Local Programs and Support

This agency serves as FEMA's principal point of contact for all federal disaster programs and initiatives by administering and coordinating federal assistance. Responsibilities include providing technical and financial assistance to state and local governments to support their efforts to:

- Develop and maintain an effective emergency management and response capability.
- Reduce the effects of disasters upon life and property.
- Mitigate the causes of emergencies during disasters by developing local programs which are intended to prevent the loss of life and property.
- Develop plans and procedures for consequence management of terrorism.

316.74 Federal Interagency Committee on EMS

The Federal Interagency Committee EMS, chaired by the United States Fire Administration, serves as a forum to establish and facilitate effective communication and coordination between and among federal departments and agencies involved in activities related to EMS. The Committee develops among various federal departments and agencies recommendations which will:

- Strengthen the communication and coordination of federal policies and programs;
- Promote harmony and avoid duplication of efforts; and
- Promote uniformity of standards and policies consistent with existing federal laws and regulations regarding EMS.

The Committee also maintains a liaison with national EMS trade and professional organizations and associations to ensure effective two-way communications concerning EMS issues, committee policies and programs, and federal activities related to EMS.

316.8 General Services Administration

316.81 Vehicle Engineering Branch

The Vehicle Engineering Branch is responsible for developing the federal government's specifications for ground ambulances (federal specifications KKK-A-1822) which are used by ambulance manufacturers as a basic blueprint for their vehicles.

317 Other National Agencies

317.1 National Registry of Emergency Medical Technicians

The National Registry of Emergency Medical Technicians is a non-profit agency located in Columbus, Ohio that maintains a system for testing and certifying First Responders, EMT-Basics, EMT-Intermediates and EMT-Paramedics. National Registry certification is often sought by EMS personnel as it can make it easier to become certified in certain states.

317.2 ASTM International

Founded in 1898, ASTM is a non-profit standard setting agency that has established some standards for emergency medical services activities and equipment.

320 Prehospital EMS

This area is divided into three parts, specifically:

- **321 First Responder Services**
- **322 Ground Ambulance Services**
- **323 Air Medical Services**

321 First Responders

A First Responder is an individual who, as part of her or his activities, is likely to be the initial medical rescuer at the scene of an emergency and provides emergency care until the ambulance arrives, or another means of transportation to a medical facility is arranged. Firefighters, law enforcement personnel, community health aides, and search and rescue personnel are all examples of First Responders. Some ambulance services have First Responders trained and located at strategic points in their service areas.

There is a national standard curriculum for First Responders that is approximately 40 hours in length. The Emergency Trauma Technician (ETT) is the Alaskan equivalent of the First Responder, and persons trained to this level are found in virtually all parts of the state (see **Section 342**). An individual or organization is not required to be certified to provide emergency care at the ETT level. However, it is recommended that they all have a certificate of course completion. There are numerous First Responder services in Alaska. For an up-to-date listing, refer to the current *Alaska EMS Directory* (available from the State EMS Office).

322 Ground Ambulance Services

Emergency Medical Service regulations provide for certification of Basic Life Support (BLS) and Advanced Life Support (ALS) Prehospital Emergency Medical Services.

To ensure a minimum level of patient care in Alaska, state statutes and regulations (7 AAC 26.210 – 7 AAC 26.999) require that ground ambulance services providing advanced life support patient care become certified. Each certified service must have a sponsoring physician who oversees all the medical personnel and reviews patient care. Those services that can provide advanced life support (ALS) services 24 hours a day, seven days a week must become state-certified as ALS services. If a service provides ALS occasionally, it must become state-certified as a Basic Life Support (BLS) service, with a notation on its certificate that ALS services are sometimes provided. Ambulance services that provide only BLS service are not required to become certified but may choose to do so if they can meet state BLS certification standards 24 hours a day, seven days a week.

In general, it is expected that a basic life support service will have at least three personnel certified at the EMT-I level and at least three other personnel to act as drivers for the emergency vehicle(s) to be considered eligible for certification.

An advanced life support service is expected to have at least three advanced life support providers and at least three EMT-I personnel to be considered eligible for certification

323 Air Medical Services

Services that advertise to provide air medical services, or routinely provide advanced life support air medical services, are required by state statute and regulations to become certified to provide the public with a minimum level of patient care. There are three levels of certification: medevac, critical care air ambulance, and specialty air medical transport team. Each level must have a physician medical director responsible for the medical personnel and for review of patient care. The requirements for medical personnel, aircraft, and medical equipment become more advanced with each level. See Section 510 for more information.

330 EMS Facilities

Medical facilities in Alaska may be owned and operated by a number of sources: the federal government (military and the Alaska Area Native Health Service), Regional Health Corporations, the private sector, local governments, and the State of Alaska. (See the Alaska EMS Directory for a listing of the EMS-related facilities.)

This area is divided into two parts, specifically:

- **331 Acute Care Hospitals**
- **332 Emergency Care Clinics**

331 Acute Care Hospitals

There are 24 acute health care hospitals in Alaska. Six of these facilities are located in Southeast, thirteen in Southcentral Alaska and five in the Northern region. Six hospitals are Alaska Area Native Health Service or Native Health Corporation hospitals, two are military, and the rest are private or community hospitals. All of these facilities provide emergency services. The Alaska Native Medical Center in Anchorage, in Anchorage, is certified by the Department as a Level II Trauma Center and Norton Sound Health Corporation is certified by the Department as a Level IV Trauma Center..

332 Emergency Care Clinics

There are many emergency care clinics in Alaska. These are health clinics where minor conditions may be treated by a physician, physician's assistant, or nurse practitioner, and sometimes with the advice of a physician by radio or telephone. Many smaller Native villages also have clinics staffed with Community Health Aides.

340 EMS Training

EMS training and certification ensure that proficient frontline workers deliver emergency medical services in Alaska.

This area is divided into three parts, specifically:

- **341 State Certification**
- **342 Levels of EMS Providers**
- **343 Training Agencies**

A list of training courses approved by the Section of Community Health and EMS is maintained on the CHEMS web site.

341 State Certification

There are two state agencies involved in the certification and licensing of EMS personnel in Alaska: the Department of Health and Social Services (DHSS) and the Department of Community and Economic Development. The latter provides administration and support to the Alaska State Medical Board, which licenses Mobile Intensive Care Paramedics.

State statute empowers the DHSS to develop regulations to carry out its mission of statewide EMS system development. In 1981 the EMS Section developed regulations regarding EMTs, EMT Instructors, and EMT training programs. The regulations address training requirements, qualifications for certification and recertification, applicants from out-of-state, suspension and revocation of certificates, and many other matters. The DHSS also has developed regulations concerning ground ambulance services, air medical services, Emergency Trauma Technician (ETT) Instructors and ETT

training programs, defibrillator technicians, physician medical directors, emergency medical dispatchers (EMDs) , trauma center certification and automated external defibrillator training. Certification regulations ensure standardized training, certification, and recertification for emergency medical responders in Alaska. (See **Section 311** for regulation references.) The State EMS Office also advises the Alaska State Medical Board regarding eligibility of applicants for Mobile Intensive Care Paramedic licensure.

342 Levels of EMS Providers

State regulations provide for four levels of certified EMTs, including EMT I (basic), ETT-Defibrillator (ETT-D) or EMT-Defibrillator (EMT-D), EMT II (intermediate), and EMT III (intermediate plus some advanced cardiac skills). Under the Alaska Medical Practice Act, Mobile Intensive Care Paramedics (MICPs), also known as EMT-Paramedics in some states, are licensed by the State Medical Board, but all applications are reviewed by staff of the EMS Unit. A procedure set out in regulations (7 AAC 26.670) allows for department approval of additional medications and procedures.

342.1 ETT

The Emergency Trauma Technician (ETT) training program is at least 40 hours in length and teaches the basics of emergency medical care. The course has evolved significantly since it was first developed in Southeast Alaska for use in logging camps. Courses are taught by certified instructors and occur throughout the state. Emergency Trauma Technicians are not technically certified by the State of Alaska and therefore do not receive the limited immunity from liability conferred by *AS 18.08.086*.

342.2 EMT-I

The Emergency Medical Technician-I (EMT-I) is equivalent to the National Standard EMT-Basic, as described in the United States Department of Transportation (USDOT) curriculum revised in 1994, excluding the use of advanced airway devices. The EMT provides basic life support such as splinting, hemorrhage control, oxygen therapy and suction, and CPR. The use of automated external defibrillators is included in the EMT-I curriculum. Mastery of EMT-I level knowledge and techniques must occur before moving to an EMT-II level of certification. The course is at least 120 hours.

342.3 Defibrillator Technicians/AED Use

It is widely recognized that early defibrillation provides the best chance of survival in out-of-hospital cardiac arrest.

Automated External Defibrillation

In 1998, the Alaska Good Samaritan Law (AS 09.65.090 – Civil Liability for Emergency Aid) was amended to provide some immunity from civil liability to "properly trained" individuals who used automated external defibrillators (AEDs) and notified the appropriate EMS agency during the emergency. "Proper training" can be provided by the American Heart Association, the American Red Cross, or another agency approved by the Alaska Department of Health and Social Services under its regulations.

Manual Defibrillation

Manual defibrillation is an advanced life support skill and until the advent of automated external defibrillators (fully automatic and semi-automatic devices), defibrillation in Alaska was only performed at the EMT-III level and above. EMT-I personnel trained and certified as defibrillator technicians may use manual devices. Manual defibrillator Technicians must have physician medical directors. Training courses for manual devices are sixteen hours in length.

Because of the advances in AED technology, the Defibrillator Technician program is expected to cease to exist as a result of attrition.

342.4 EMT-II

The Emergency Medical Technician II (EMT-II) level exceeds the National Standard Training Program EMT-Intermediate (1985), developed by the USDOT. The EMT-II class is at least 50 hours in length and prepares the student to initiate intravenous lines and administer fluids and certain medications. A person must have ten patient contacts prior to training as an EMT-II. Certification as an EMT-II also requires that the individual be under sponsorship of a DHSS-approved physician medical director.

342.5 EMT-III

The Emergency Medical Technician III (EMT-III) program is designed to add advanced cardiac care skills to those the EMT has learned already. Included in the training program is the use of morphine, lidocaine, atropine, and epinephrine. The EMT-III training program is at least 50 hours in length. A person must have at least 10 patient contacts and have at least 10 venipunctures as an EMT-II to be being trained as an EMT-III. As with the EMT-II, certification requires that the individual be under the sponsorship of a DHSS-approved physician medical director. A process exists in regulations (7 AAC 26.670) for the department to approve additional medications and procedures.

342.6 Mobile Intensive Care Paramedic

Mobile Intensive Care Paramedics (MICPs) are licensed by the Alaska Department of Commerce and Economic Development through the Alaska State Medical Board, with assistance from the State EMS Unit staff. MICP's provide care well beyond the EMT-III level and function under the direct or indirect supervision (standing orders, etc.) of a physician. MICP programs are typically over 1,200 hours in length and include a field internship which is 480 hours, or more, in length. Paramedics are found in the most populated areas of Alaska, including Anchorage, Fairbanks, Kenai, Soldotna, Nikiski, Barrow, Nome, Kotzebue, Juneau, Sitka, and Ketchikan, and in a few other smaller communities. In some of these communities, all prehospital emergency medical care is provided by Mobile Intensive Care Paramedics. In others, the MICP may act as a supervisor or EMS director. Under Alaska statutes, the Department of Health and Social Services is responsible for certifying Mobile Intensive Care Course Coordinators and approving all MICP training programs taught in Alaska.

343 Training Agencies

EMS training in Alaska is provided by both public and private agencies. Refer to the current Alaska EMS Directory for an up-to-date listing as well as the Regional EMS Councils.

Contact information for EMS training agencies is available in the EMS Directory downloadable from the CHEMS web site and from Regional EMS Offices.

350 Support Services

Many other agencies provide services that either dovetail with, or enhance, the services provided in Alaska's EMS system. This section is divided as follows:

- **351 Disaster Services**
- **352 Fire Emergency Services**
- **353 Hazardous Materials Services**
- **354 Search and Rescue**
- **355 Other Health Services**
- **356 Injury Prevention**
- **360 Critical Access Hospitals and Rural Health Networks**
- **365 Critical Incident Stress Management Teams**

351 Disaster Services

Alaska's disaster service agencies include the Division of Emergency Services in the Department of Military and Veterans Affairs, and the American Red Cross. Other state, local, federal, and private agencies may be called upon to provide assistance depending on the nature and magnitude of the disaster. See the *Alaska EMS Directory* for information on these other resources.

The Department of Health and Social Services is very involved in bioterrorism planning and response and has two large grants, both of which impact emergency medical services agencies. The grants are from the Centers for Disease Control and Prevention for Public Health Preparedness and Response and from the Health Resources and Services Administration for Bioterrorism Hospital Preparedness. These activities are outlined in Section 355.4.

351.1 Division of Emergency Services

The Alaska Disaster Act (*Alaska Statute 26.23*) of 1977 created the Alaska Division of Emergency Services (ADES) within the Department of Military and Veterans Affairs. The Division is charged with the responsibility of coordinating all state disaster response and recovery efforts. ADES ensures that communities have been warned in the event of a potential or actual disaster and that local governments have responded to protect property, save lives, and restore vital services. ADES also

provides for the human needs of disaster victims. Training of public officials, both state and local, in emergency management planning and preparedness is an important part of the Division's activities. The Division maintains a 24-hour warning system for rapidly disseminating warnings and dispatching trained disaster workers statewide. The Section of Community Health and EMS maintains a close working relationship with the Division of Emergency Services, participating on the State Emergency Response Commission (SERC), the SERC Training Committee and the SERC All Hazards Plan Review Committee.

351.2 American Red Cross

The Red Cross Disaster Program offers emergency assistance to victims of disaster and emergency workers. The United States Congress gave the American Red Cross (ARC) responsibility and authority to coordinate the federal response to emergencies and major disasters as declared by the President of the United States. Its major role is to coordinate and move human resources and emergency supplies to meet the human needs created by a disaster. When a local chapter is unable to meet the needs of victims, the regional and national organizations provide assistance.

Red Cross assistance includes food, clothing, shelter, first aid, and other basic elements of comfort and survival. Volunteers operate short-term shelters, fixed or mobile feeding stations, emergency first aid stations, and provide temporary individual assistance. Long-term assistance includes counseling and assistance to identify and access other resources, or may supply additional direct assistance to enable victims to re-establish themselves. The Red Cross also handles inquiries from concerned friends and relatives regarding the well being of individuals living in the disaster zone.

Training offered by the Red Cross includes shelter management, mass feeding, disaster services regulations and procedures, survey/damage assessment, and supervisory courses; as well as the various water safety, first aid, and CPR courses it is well known for. The main training center in Alaska is in Anchorage. There are three Red Cross Chapters in Alaska: Interior Alaska (Fairbanks-based), Southcentral (Anchorage-based), and Southeast (Juneau-based).

352 Fire Emergency Services

The *Alaska EMS Directory* contains resource listings for **Chemical, Shipboard** and **Forest Fire Fighting**.

353 Hazardous Materials Services

Hazardous Materials Services are divided into three areas: **Identification and Information, Emergency Response,** and **Required Reporting of Spills/Releases**. See the *Alaska EMS Directory* for more information. (*Alaska EMS Goals* has other resources on hazardous materials. **Section 530** provides additional information about hazardous materials planning, training, and other resources. **Sections 732-735** list recommended equipment and supplies for ambulance services, clinics, and hospitals as well.)

354 Search and Rescue

Several agencies participate in search and rescue activities in Alaska. The *Alaska EMS Directory* contains listings for the **Alaska State Troopers, Mountain Rescue Teams, Search and Rescue Operations,** and **Search Dogs**. Information sources in the *Directory* include **Avalanche and Mountain Weather Forecast, Earthquake/ Tsunami Information,** and **Weather Reports. Hyperbaric Facilities** are listed in the *Directory* as well.

355 Other Health Services

355.1 Disease Outbreaks

There are two primary agencies in Alaska with roles in disease outbreak response. The Division of Environmental Health of the Alaska Department of Environmental Conservation plays a role in investigating foodborne and waterborne illnesses. The Section of Epidemiology, Division of Public Health, Alaska Department of Health and Social Services has a major role in disease outbreaks. Investigators respond to epidemiological emergencies, such as those caused by botulism or a communicable disease outbreak.

Under its grants from the Centers for Disease Control and Prevention, the Department of Health and Social Services maintains a Bioterrorism Interagency Operations Team (BIO-Team) which helps keep entities within the department, and other departments and agencies informed about each other's roles and capabilities regarding the detection and response to diseases which may be indicators of a bioterrorist event.

355.2 Poison Emergencies

For years, Alaska had one Poison Control Center, which was located at Providence Hospital in Anchorage. Recent federal legislation has resulted in enhancement of the poison control system throughout the country. A uniform toll free access number for poison control center access was established in September 2001. Alaska's poison exposure calls are handled by the Oregon Poison Center, which receives federal funds for these purposes, and works closely with the State of Alaska through a memorandum of agreement. The Oregon Poison Center uses the Alaska Community Medical Resource Database, and online database of medical resources throughout the state, to provide information on local medical assistance for poison emergencies to Alaska callers.

The Alaska Poison Control System is consistent with, and supportive of, the national structure and national toll free poison center number: 1-800-222-1222.

355.3 Radiological Emergencies

Radiological emergency resources are available through the Division of Emergency Services, Alaska Department of Military and Veterans Affairs or the Section of Laboratories, Division of Public Health, Alaska Department of Health and Social Services.

355.4 Bioterrorism

The Department of Health and Social Services has received two major bioterrorism grants including one from the Health Resources and Services Agency that focuses on preparedness for hospitals and another, from the Centers for Disease Control and Prevention that deals with the following areas:

- Focus Area A: Preparedness Planning and Readiness Assessment
- Focus Area B: Surveillance and Epidemiology Capacity
- Focus Area C: Laboratory Capacity – Biological Agents
- Focus Area E: Health Alert Network/Communications and Information Technology
- Focus Area F: Risk Communication and Health Information
- Focus Area G: Education and Training

356 Injury Prevention

Various agencies offer injury prevention activities in Alaska. Most programs limit activities to a particular population, geographic area, or a few categories of injury. Many Alaskan organizations offering or supporting injury prevention are listed in the *Alaska EMS Directory*. Categories in the Directory include: **Statewide, Regional, Local Contacts,** and **Research and Data**. Other injury prevention programs and resources can be learned by contacting the state Injury Surveillance and Prevention Program within the EMS Unit of CHEMS.

356.1 American Heart Association, Alaska Affiliate

The American Heart Association (AHA) is a non-profit health organization funded by private contributions. Its mission is to reduce disability and death from cardiovascular diseases and stroke. The AHA was formed in 1924 as a professional society by pioneering cardiologists. The Alaska Affiliate has been incorporated since 1958. AHA's first priority is the prevention of heart disease, and this is achieved through cardiovascular research, and professional and public education programs.

The AHA has developed programs and designed materials to inform people about, and involve them in, the fight against cardiovascular disease and stroke. AHA targets four major areas: work, school, community, and health. Programs provide the latest information on high blood pressure, smoking, nutrition, and exercise in formats for all age groups.

Emergency cardiac care encompasses basic life support, advanced cardiac life support, pediatric basic and advanced life support, education, communications, and transport. The AHA training network is a structure for education that incorporates quality control. Emergency cardiac care is an integral part of a community-wide emergency medical services system.

360 Critical Access Hospitals/Rural Health Networks

Under the Rural Hospital Flexibility Program, Hospitals seeking designation as a Critical Access Hospital must, in addition to other requirements set forth in regulations, complete an emergency medical services plan.

The emergency services plan must address the coordination of the provision of emergency medical services in the applicant's service area and ensure compliance with state laws related to emergency medical services and critical access hospitals.

If the conversion to a Critical Access Hospital designation will not change the emergency medical capabilities (including staffing, equipment, or hours of operation) of the hospital, the emergency medical services plan may be as basic as a statement to that effect coupled with a description of the current EMS system, with emphasis on the hospital – ambulance interface.

If the proposed conversion of the hospital will change the emergency medical capabilities of the hospital, the emergency medical services plan must:

1) Describe the proposed changes, including information on the level of personnel who will be available to provide emergency medical care and expected response times of emergency medical staff who must travel to the facility (e.g., registered nurse responding to the facility to meet an incoming ambulance);
2) Describe the effects of the proposed changes on:
    a) Local emergency medical services agencies;
    b) Emergency medical communications, including on-line medical control;
    c) Emergency patients who arrive by a means other than an ambulance, including walk-ins, patients arriving in personal vehicles, etc.
3) Describe the process for ensuring the affected EMS agencies are made aware of the changes;
4) Describe the process for ensuring the public is made aware of the effects of the changes on emergency medical services capabilities (this may be excerpted from the community education plan);
5) Describe the steps the hospital is taking to ensure timely and adequate emergency medical care.
6) Describe the process that will be used by the hospital to review and improve the timeliness and adequacy of emergency medical care, response times and other factors influencing patient outcome.

365 Critical Incident Stress Management

Emergency Medical Services personnel may be confronted by events which have the potential to cause significant psychological stress, such as the death of a child, a line of duty death of a fellow rescuer, or the death of a patient with whom the rescuer shares a particular connection. The effects of these events, known as critical incidents, are thought to be lessened through the timely use of Critical Incident Stress Management Teams. Regional EMS Offices are often the best contact for initial information on the availability and capabilities of CISM teams. Teams are comprised of specially trained mental health professionals and peer members. CISM efforts can be particularly helpful when they are integrated with other emergency mental health services, such as those coordinated by the State of Alaska, Department of Health and Social Services, Division of Mental Health and Developmental Disabilities.

SECTION 400
EMS FRAMEWORK

OVERVIEW

By outlining what emergency medical services and resources should be available to Alaskans and visitors in specific settings, the framework in this guide provides a means of systematically working towards achieving the desired EMS system. The framework was adapted from two models. The first is the community levels-of-care model. The second model consists of the program components mandated by the federal EMS program, consensus standards for statewide EMS systems developed by the National Highway Traffic Safety Administration, USDOT, in the late 1980s, and components from the *Model Trauma Care System Plan* developed by the Health Resources and Services Administration, US Department of Health and Human Services in 1992.

This section is divided into four sub-sections:

- **Section 410**
- **Community Levels-of-Care Model**
- **Section 420**
- **Federal EMS Planning Model**
- **Section 430**
- **Alaska EMS System**
- **Section 440**
- **Prehospital/Hospital/Post-Hospital Index**
- **Section 450**
- **Basic Community Planning**

System goals, which guide state, regional, and local EMS programs to plan for, develop, and sustain appropriate levels of emergency medical care in Alaska, are listed in **Section 430**. The planning model described in this section is used to organize the community recommendations in **Section 600**.

410 Community Levels-of-Care

411 Origin

The Alaska health care system, as described in the *1984 Alaska State Health Plan*, utilizes a regional approach for organization. This approach, the **community levels-of-care concept**, identifies appropriate health resources and services for five community levels. These levels are:

- **Level I – Village**
- **Level II – Sub-Regional Community**
- **Level III – Regional Center**
- **Level IV – Urban Center**
- **Level V – Metropolis**

412 Service Linkage

A central element of the levels-of-care concept is service linkage. If appropriate services are unavailable in a Level I community, assistance may be sought from a Level II community. If appropriate services are unavailable at a Level II community, care may be sought from a Level III community, and so on. This coordination of health care provides a continuum of service delivery and referral patterns, from one level to the next higher level. However, in some instances, a community will relate directly to the level capable of providing appropriate care efficiently, bypassing other levels of communities. For example, an injured person in a Level II community may be transported directly to a medical facility in a Level IV community.

413 EMS characteristics

Level I and II categories are separated into **isolated communities** and **those with road access to other communities providing a higher level of service** (or **highway communities**). Highway communities are defined as **those with year-round road access to a community with a hospital within 60 minutes or less under normal conditions**.

Although the *Alaska State Health Plan* examined several characteristics to determine a community's level of care, only three characteristics are significant in reference to emergency medical services. These are **health care services, access** and **population** (see **Table 410-1**). When a community fits into more than one level based on these three characteristics,

access has priority over **population** and **health care services** has priority over **access**.

health care services > access > population

414 Community Classifications

This planning guide uses nine community classifications. These include:

- **Level I Isolated Village**
- **Level I Highway Village**
- **Level II Isolated Town/Sub-Regional Community**
- **Level II Highway Town/Sub-Regional Community**
- **Level III Large Town/Regional Center**
- **Level IV Small City**
- **Level V Urban Center**
- **Level VI Metropolis**
- **Other Areas**

Other Areas is a conglomerate of four types:

Very Small Communities are those with a population of 25 people or less, such as homesteads, farms, isolated residences, vacation areas, communes, fish camps, hunting and fishing lodges, and guide services.

Highways refers to those major roadways in the state, including: the **Alaska Highway**, the **Copper River Highway**, the **Dalton Highway**, the **Denali Highway**, the **Edgerton Highway/McCarthy Road**, the **Elliott Highway**, the **George Parks Highway**, the **Glenn Highway**, the **Haines Highway**, the **Klondike Highway**, the **Richardson Highway**, the **Seward Highway**, the **Steese Highway**, the **Sterling Highway**, and the **Taylor Highway/ Klondike Loop**. The ***Marine Highway*** is Alaska's marine transportation system which provides year-round ferry service to Alaska's coastal communities and to Washington and British Columbia.

There are two types of ***At-Risk Sites***. ***Schools*** refers to those private and public institutions that provide instruction to children. **High-Risk Work Sites** are industrial activity areas, either permanent or mobile, involved in what the Alaska Office of the National Institute for Occupational Safety and Health considers high-risk industries , including: agriculture/forestry/fishing, transportation/communications/public utilities, and manufacturing. These work-sites can be either ***Remote*** (one hour or more from a medical facility under normal conditions) or ***Nearby*** (less than one hour from a medical service by road access under normal conditions).

415 Other Characteristics

Knowing certain characteristics about a community can make planning for emergency medical service easier. If you need to know more about these characteristics, contact the regional or subarea EMS office for the particular community (see **Section 140** for a list).

The Section of Community Health and EMS maintains a list of communities and the EMS characteristics of each on its web site at http://www.chems.alaska.gov.

Table 410-I
EMS Community Levels-of-Care

COMMUNITY TYPE	POPULATION	EMS	GENERAL ACCESS
LEVEL I Isolated Village	Usually 50 - 1,000 in immediate community	Community clinic with a CHA or EMT	Limited air or marine highway access to a Level III or higher community; maintained road access exceeds 60 miles
Highway Village	Usually 50 - 1,000 in immediate community	Community clinic with a CHA or EMT	Limited air or marine highway access to a Level III or higher community; year-round, 60 minute or less road access
LEVEL II Isolated Sub-Regional CommunityCommunity	Usually 500 - 3,000 + in immediate community	Community clinic with PA, NP, or physician; health care services provided by public or private sector	Daily marine highway or air access to closest Level III or higher community; air service to Level I communities in area
Highway Sub-Regional CommunityCommunity	Usually 500 - 3,000 + in immediate community	Community clinic with a PA, NP, or physician; health care services provided by public or private sector	Daily marine highway or air access to closest Level III or higher community; year-round 60 minute or less road access
LEVEL III Large Town or Regional Center	Usually 2,000 - 10,000 + in immediate community, providing services to a regional population	Community hospital and physicians; health care service agencies include both public and private	Daily airline service to Level III, IV & V communities; air service to Level I & II communities in area; road or marine highway access all year
LEVEL IV Small City	Usually 10,000 - 100,000 in immediate community, providing services to a larger regional population	Hospitals with a 24 hour staffed ED and full continuum of care; multiple providers of health care and other services including both public and private programs	Daily airline service to Level II, III, IV & V communities; road or marine highway access all year
LEVEL V Urban Center	Usually 100,000 + in immediate community, providing services to a statewide population	Some specialized medical and rehabilitation services for low incidence problems	Daily airline service to Level II, III, IV & V communities; road or marine highway access all year
OTHER AREAS Very Small Communities	25 - 150 in immediate community	Designated area for equipment and patient care with a CHA, ETT or EMT	Limited road, air or marine highway access to a Level III or higher community
Major Highways	Variable	Level II ambulance service every 100 miles & first responder service every 50 miles	Year-round, 60 minute or less ground transportation or air access to a Level III or higher community
Marine Highways	Variable	Safety officer with ETT or EMT training	Helicopter or fixed wing access
At-Risk Sites Schools	Variable	Safety coordinator & at least two ETTs	Air, marine & ground transportation access
High-Risk Work Sites: Remote	Variable	ETT or EMT for every 25 employees	More than one hour from a medical service
High-Risk Work Sites: Nearby	Variable	ETT or EMT for every 50 employees	One hour or less from a medical service

415.1 Regions and Subareas

Each community is identified by the region and subarea in which it belongs. Descriptions of the Alaska EMS Regions and Subareas are found in **Section 140**.

415.2 Access

How people can get to and from a community is an important factor in planning for EMS services.

Alaskan communities can be reached by road, water, and/or air. The nearness, or proximity, of another community may also be a key to access.

Road access has three community categories:

1. **highway**: linked to the Alaska highway network throughout the year.
2. **summer highway**: linked by the Alaska highway network during the summer only.
3. **limited highway**: outlying roads but no linkage to the Alaska highway network.

Water access has two divisions, **ocean access** and **other water access**. **Ocean access** has three community categories:

1. **marine**: linked by the Alaska marine highway system.
2. **limited marine**: occasional marine highway service.
3. **coastal**: ocean access without linkage to the marine highway system.

Other water access has two categories:

1. **river**: along a river used as a primary transportation route (boating, winter ice road).
2. **lake**: along a lake used as a primary transportation route (boating, winter ice road).

Air access has six categories:

1. **airstrip**: authorized landing area with small plane capacity only.
2. **airport**: authorized landing area with regular, scheduled commercial air service.
3. **floatplane**: landing area available for float planes (seaplanes).
4. **seaport**: designated landing area for float planes (seaplanes).
5. **helicopter**: landing area available for helicopters.
6. **heliport**: designated landing area for helicopters.

Proximity to another community has one category:

1. **satellite**: road access to a higher level community in 30 minutes or less under normal conditions.

4115.3 Seasonal Changes

Alaskan communities have several types of population-related, seasonal impacts. Besides changes in populations, there can be increases or decreases in **transportation** (boat, motor vehicle, or airplane traffic), **EMS responders** (physicians, PAs, MICPs, CHAs, RNs, EMTs, or ETTs) and **industrial activity** (both high-risk – construction, fishing , hunting, logging, and mining – and low risk – tourism). These impacts can occur during any season, although activities such as tourism tend to be greater in the summer months. Most changes cause increases (such as tourism bringing people into an area, increasing population and transportation), but others cause decreases (such as people leaving communities to fish for the summer, producing a population and, in some cases, an EMS personnel decrease). See **Section 541** for further explanation.

415.4 Providers and 911 Access

This section shows the **type of EMS provider** in a community, specifically whether the EMS provider is a service that is volunteer or paid, a health aide, or military. A **Volunteer EMS Service** means that the majority of EMS providers are volunteers. A **Paid EMS Service** means that the majority of EMS providers are paid. In a few areas, there is a third category called paid-on-call. EMS providers refer to those people in the community with training to provide emergency medical services. In most cases these will be physicians, physician assistants, paramedics, nurses, emergency medical technicians, or emergency trauma technicians. Military includes the United States Air Force, Army, Coast Guard (officially civilian in peacetime), and Navy. Those communities with 911 or Enhanced 911 access are indicated here as well.

420 Federal EMS Planning Model

Fifteen components were identified by the national EMS program in the early 1970s as essential in establishing a comprehensive EMS system. These included: personnel, training, communications, transportation, facilities, critical care, public safety agencies, consumer participation, accessibility to care, patient transfer, coordinated record keeping, public education and information, evaluation, disaster response, and mutual aid agreements.

National direction for EMS system planning also comes from the National Highway Traffic Safety Administration (NHTSA). NHTSA has developed ten national EMS systems consensus standards, which are used for technical assistance team (TAT) reviews of state EMS programs. The ten standards cover:

- Regulation and policy;
- Resource management;
- Human resources and training;
- Transportation;
- Facilities;
- Communications;
- Public information and education;
- Medical direction;
- Trauma systems; and
- Evaluation.

National direction for trauma care system planning and development was provided from the Bureau of Health Resources Development, US Department of Health and Human Services in 1992. The *Model Trauma Care System Plan* identifies nine essential components for the development of an inclusive trauma care system. These include:

- Leadership;
- System development;
- Legislation;
- Finance;
- Public information, education and prevention;
- Human resources;
- Prehospital care;
- Definitive care facilities; and
- Evaluation.

Alaska EMS System

The Alaska EMS System planning model combines the community levels of care model, the federal planning model, and the NHTSA national EMS systems consensus standards described in the previous two sections. The nine community classifications use fourteen components to set system goals for state, regional, and community EMS programs. These system goals are listed under the following 36 sub-component headings. Specific goals that have been developed for the eight levels of community follow in **Section 600**. (Since Alaska currently lacks a metropolis, no recommendations for Level VI Communities have been developed.)

The fourteen components have been honed from seventeen. Two additional components, medical direction and injury prevention, were added to the fifteen identified in the original federal planning initiative. These seventeen components have been reorganized into the fourteen shown in this section. Patient transfer and transportation became *Patient Transfer/Transport*. Consumer participation was added *to Public Education and Information*. Critical care sub-components – regional protocols, appropriate care and transfers, and specialty care centers – have been incorporated into *Training* (Standards), *Patient Transfer/Transport* (Protocols) and *Facilities, Equipment and Supplies*, respectively. **All fourteen components are essential for a comprehensive EMS program.**

431 Fourteen Components

1 PERSONNEL

A Administration

The number of qualified EMS administrators, clinical experts, and technical specialists should be adequate to provide the necessary direction and assistance to statewide and regional EMS systems development.

B Providers

An adequate supply of trained EMS prehospital and hospital personnel to provide quality 24-hour-a-day, 7-day-a-week coverage of emergency medical services appropriate to each

level of community should be maintained throughout the state.

2 TRAINING

A Standards

Basic and advanced-trained emergency medical services should be certified or licensed according to state statutes and regulations. Recommended standards for training, continuing education, certification, and curricula for all other categories of emergency care personnel should be established to assure quality of patient care throughout the state. The treatment of the seriously ill or injured patient, from the point of EMS systems entry through rehabilitation, should be carried out according to protocols appropriate for regional capabilities.

B Prehospital Training Personnel

Training programs and resources within Alaska should be adequate to meet all EMS prehospital personnel needs at the appropriate community level. All emergency medical personnel should be trained in the Incident Command System to efficiently integrate into a disaster response as detailed in **Component 11 – Disaster Response**.

C Clinic and Hospital Training Personnel

Continuing education and specialized EMS training for clinic and hospital personnel should be provided within Alaska to the extent possible. All emergency medical clinical and hospital personnel should be trained in the Incident Command System to efficiently integrate into a disaster response as detailed in **Component 11 – Disaster Response**.

3 COMMUNICATIONS

A Local/Regional Systems

Local and regional EMS communications systems should be established and maintained to assure:

- Residents and visitors easy access into a medically controlled system, preferably through a 911 central access number;
- The most rapid dispatch of appropriate personnel and transportation vehicles;
- Coordination among public safety agencies;
- Medical direction communications between prehospital care providers and clinic or hospital-based medical personnel; and
- Flexibility to handle emergencies of any magnitude.

B State System

All EMS communications systems development should be consistent with an overall state EMS communications plan, using existing systems and resources in a cost efficient, practical manner. The state EMS communications plan should link with a statewide communication plan that ensures operation and maintenance of the state-owned emergency communications network.

A federal/state partnership to deploy a digital trunked radio system in Alaska began in the late 1990s. The program, known as the Alaska Land Mobile Radio System (ALMR), will be implemented in phases, beginning with the road corridor between Anchorage and Fairbanks. Agencies purchasing communications equipment should become familiar with the ALMR project to ensure that the correct equipment is purchased.

C Backup and Reliability

All EMS communications systems should maintain a minimum of 95 percent reliability and have a back-up system if the primary system fails. Any new technologies should be evaluated to ensure they provide the same or increased reliability.

4 PATIENT TRANSPORT/TRANSFER

A Standards

Ground and air ambulance services should be certified according to state statutes and regulations.

B Resources

There should be available an adequate number of ground and air ambulance vehicles, suitably staffed and equipped, to ensure timely response and transport from the scene of the medical emergency to medical facilities to minimize personal injury, disability, and loss of life for injury and illness victims. Emergency medical services should have an established mechanism

to ensure that airports are accessible and operable when needed for medevacs.

C Protocols

The transfer of seriously ill or injured patients, from the point of EMS systems entry through rehabilitation, should be carried out according to protocols appropriate for local, regional, and state resources. The protocols should address both adult and pediatric emergencies, equipment and personnel needs, and appropriateness of transport means (air versus ground versus water). The protocols should assist caregivers in determining the appropriate facility to meet the patient's medical needs. Patients should be transported in a stabilized condition to an appropriate facility whenever possible. All protocols should be reviewed regularly by appropriate medical directors, administrators, and others.

5 FACILITIES, EQUIPMENT AND SUPPLIES

A Facilities

There should be available an adequate number of accessible medical facilities – clinics, emergency departments, surgical suites, and critical care units – to provide service on a 24-hour-a-day, 7-day-a-week basis, that meet state-recommended standards and are coordinated with other health care facilities within the system. Schools and other facilities should be available and included as resources in plans for disaster responses. Specialized critical medical care units should meet the demands of service areas and cover trauma, burn, spinal cord injury, poisoning, acute cardiac, high risk infant, pediatric, and behavioral emergencies, as well as other acute medical conditions.

B Equipment and Supplies

All emergency medical facilities should have the necessary equipment and supplies to provide services appropriate for each community level within their service area.

6 PUBLIC SAFETY

A Public Safety Agencies

All public safety agencies involved in emergency medical response should be coordinated to provide the most effective use of training opportunities, appropriately trained personnel and equipment for search and rescue, extrication, emergency patient care, injury prevention, and disaster response. Public safety agencies include police, village public safety officers, fire, search and rescue, lifeguards, park rangers, national ski patrol, and disaster services.

B Environmental Response

Emergency medical services provided during hazardous materials incidents should be coordinated with the appropriate environmental health agency (federal, state or local government), and hazardous materials spill response agency, as specified in the State Master Plan for Oil and Hazardous Substance Discharge Prevention and Contingency.

7 ACCESSIBILITY TO CARE

A Financing Services

Services should be financed so the consumer's ability to pay or economic status does not interfere with delivery of services at the time of need and does not affect the quality of health services provided.

B Equal Care Opportunity

All patients should be provided emergency care and transportation without regard to race, creed, color, sex, national origin, ability to pay, or disability.

C Service Availability

There should be access via telephone (preferably through a 911 central access number) or radio to trained and equipped emergency medical responders within a reasonable time, 24 hours a day, 7 days a week.

8 COORDINATED RECORD KEEPING

A Local Record Keeping

Each service should have an EMS patient record-keeping system that includes a state approved

minimum data set, and sufficient quality assurance/improvement information, and sufficient description of circumstances of injury, and is consistent with other medical record keeping systems within the state.

B Regional and State Coordination

All regional EMS data systems development should keep within a coordinated statewide EMS information system. A statewide Patient Care Information System, including the Trauma Registry, involving all acute care hospitals in the state, collects and reports on traumatic injuries and sudden illnesses in Alaska. A statewide Run Report Database should be maintained to receive summary data from ambulance, air medical, and first responder services.

9 PUBLIC INFORMATION AND EDUCATION

A Access

Alaska residents and visitors should know how to access the local EMS system (preferably through a 911 central access number).

B Emergency Response

Alaska residents and visitors should know how to provide basic first aid and CPR, and should know how to survive in emergency situations, such as during tsunamis, earthquakes, and severe storms.

C Consumer Participation

Consumer participation in all aspects of EMS systems planning and policy setting should be encouraged.

10 EVALUATION

A Local Review

There should be a functioning system for periodic and objective review of the quality and extent of EMS systems development at the local level, for evaluation and needs assessment. All ambulance services and acute care hospitals should have on-going quality improvement programs that include participation by those involved with a particular patient and make use of such resources as the Trauma Registry Quality Assurance reports. Each organization should have a plan for taking corrective action when areas of weakness are identified.

B Regional Review

There should be a functioning system for periodic and objective review of the quality and extent of EMS systems development at the regional level, for evaluation and needs assessment.

C State Review

There should be a functioning system for periodic and objective review of the quality and extent of EMS systems development at the state, regional and locals levels for evaluation and needs assessment.

11 DISASTER RESPONSE

A Coordination

Local, regional, statewide, national, and international EMS disaster planning and response agencies should be coordinated with each other and with the Red Cross and the Division of Emergency Services, Department of Military and Veterans Affairs. Each agency should know the roles, responsibilities, access procedures, and limitations of the other agencies. Each agency should have a list of contacts for specialized resources, such as Critical Incident Stress Management teams, urban and rural search and rescue teams, hazardous materials spill response teams, and heavy rescue teams.

B Transportation

Each agency involved in EMS disaster planning and response should have a plan for transporting additional medical personnel and resources to the disaster site and for transporting the sick and injured from the disaster site to appropriate medical facilities, including medical facilities outside the state when the number of injured victims overwhelms in-state facilities. The plan should include provisions for transporting more patients than local evacuation resources can handle. The transportation plans should provide for the return of personnel and equipment. Each agency should have memoranda of agreement or understandings with applicable agencies to ensure effective integration of response. When applicable, preset agreements should be arranged between agencies to ensure an understanding of

allowable expenses and expedite reimbursement of expenses.

C Personnel

An adequate pool of individuals trained in disaster response should be available and procedures for accessing members of this pool should be widely known. Disaster plans should include provisions for accessing and incorporating additional personnel, as well as providing personnel resources to large-scale disaster operations in other parts of the state.

D Training

Each agency involved in EMS disaster planning and response should exercise its disaster plan at least annually. All disaster response personnel should be trained to function in an Incident Command System.

E Facilities and Equipment

Each agency involved in EMS disaster planning and response should have sufficient equipment to rapidly and safely begin to carry out its mission. Each agency plan should provide for equipment resupply and return.

12 MUTUAL AID AGREEMENTS

A Establishment and Maintenance

Each EMS system should provide for the establishment and maintenance of arrangements, such as mutual aid agreements or memoranda of understandings, with neighboring EMS systems for the provision of emergency medical services on a reciprocal basis. Service availability and access (time and distance) are factors to be considered. Efforts should be made to ensure that arrangements exist and are functional with bordering countries as well.

13 MEDICAL DIRECTION

A EMS Medical Directors

All emergency medical agencies should have oversight by a sponsoring physician or group of physicians to ensure medical appropriateness according to existing statutes and regulations. All emergency medical services ideally should have unrestricted access to on-line physician supervision via the state emergency communications network when applicable.

B Regional/State EMS System Medical Directors

Each region should have oversight and direction by a medical director, and overall medical direction for the state EMS program should be provided by a State EMS Medical Director (see Section 315.3).

14 INJURY PREVENTION

A Program Development

In cooperation with local, regional, national, and international efforts, a statewide injury prevention program should be developed and maintained, complete with injury prevention plans, data collection and analysis, resource guides and policies, and trained personnel (see Section 560).

B Training and Public Education

All program directors and public information/education staff should receive specialized injury prevention training on theory, program development, and evaluation. Alaska residents should know appropriate actions they may take as individuals and as communities to prevent injuries.

450 - Basic Community Planning

Emergency medical services personnel and agencies in Alaska aspire to provide the ***highest, most sophisticated*** level of care possible to the state's citizens and visitors.

Experience has shown that there can be unfortunate consequences for emergency medical services, and the people they serve, when the level of care proves to be either less than the community needs or more sophisticated than the community can sustain over time.

When the level of care is **too basic**, EMS personnel may feel that they are not being challenged, or that they lack the more advanced skills and knowledge they believe to be required to save lives.

When the level of care is **too advanced for the community**, EMS personnel may feel overwhelmed by the information and skills which must be learned, by the amount of time it takes to stay "current," and by the cost of purchasing and maintaining sophisticated medical equipment. Trying to maintain these complex skills in rural areas can result in frustration and more rapid skill degradation.

Determining the level of prehospital emergency medical care a community can sustain requires a thoughtful review of many factors. In some communities these decisions are made without consideration of the scientific basis for the level of care proposed and the amount of resources necessary to maintain that level of care.

This section is intended to provide a basic list of issues that should be considered by a community determining its optimum level of prehospital emergency medical services. It is equally applicable to communities with emerging EMS systems and to those wishing to reevaluate their level of care.

The first questions that must be answered are, "**Who will be making the decision?**" and "**What resources are available to make the best decision possible?**"

The Planning Group

It is essential to convene a group of individuals with the authority, experience, and commitment to develop or improve the community's emergency medical services system. In most cases, this group should include (at a minimum):

- The City Administrator;
- The Chief of the agency that will be providing emergency medical services;
- A physician who is familiar with the community's needs and emergency medical services capabilities; and
- A medical professional from the clinic or hospital to which the community's EMS agencies transport patients.

Often, it is useful to add others to the group, such as EMS volunteers from within the system, elected officials, or members of the public. In every case, the makeup of the planning group should be carefully considered so that the right decisions are being made by the right people for the right reasons.

Useful Resources for Planning

Alaska's emergency medical services personnel exemplify the motto, "Neighbor Helping Neighbor." Regional EMS directors, EMS staffs from communities with similar characteristics, and physicians who receive patients in hospitals or clinics are often willing to donate their expertise and enthusiasm in the pursuit of a better emergency medical services system.

An extremely valuable (and free resource) is the web site of the Section of Community Health and EMS located at http://www.chems.alaska.gov. This site has a wealth of information about EMS in Alaska, from planning documents to on-line course schedules. The following documents are just some of those that can be downloaded from the site:

- ***The Alaska EMS Goals Document***, which includes goals for communities based on characteristics such as population size and road access.
- ***The Guide for EMTs in Alaska***, which provides information about EMS training and recertification requirements.

- ***Model Standing Orders*** and ***Model Standard Operating Guidelines*** which can be adapted for use by the local community.
- ***The EMS Medical Director's Handbook***, which includes information about the roles and responsibilities of physicians within the EMS system.
- ***The Alaska EMS Regulations***,[1] which define the certification and recertification requirements for emergency medical technicians, EMS instructors, emergency medical dispatchers, and ground and air ambulances.
- ***The EMS Directory***, which provides contact information for emergency medical services agencies in Alaska.

The nearest Regional EMS or Subarea Office is usually the single best source for information and recommendations.

Issues to Consider

As an EMS system's level of sophistication and care increases, so do the requirements for initial and recurrent training, medical oversight, data collection, quality assurance, and other resources.

Once a level of care has been proposed, some key questions to determine the appropriateness of the proposal include:

- Are there data, such as run volumes, which support the proposal?

  It is wise to look at data from the community, and from communities with similar characteristics, to help evaluate the need for the proposed changes. Data may include response times, on-scene times, frequency of skill use, costs (in dollars, training hours and other relevant measures), etc. These data may be available through local or statewide EMS data collection efforts or through the Alaska Trauma Registry. Law enforcement agencies and the Alaska Department of Transportation and Public Facilities often have information, such as crash data, which can be of value in assessing needs.

- What are the resources required for initial training?

  Regional EMS staff can be particularly helpful in identifying the length of the training, costs, instructor qualifications and availability, and other resources necessary to provide initial training.

- What are the resources required for continuing education and maintaining certification?

  This discussion is much the same as that for initial training. Some communities will need to purchase training manikins, for example, to stay current on a new procedure.

- What are the costs of implementation and maintenance of the medications and procedures?

  Addition of medications and some procedures will increase the service's costs. Medications, for example, must be stored within certain temperature limits and some medications require special security precautions. In addition, medications have expiration dates and the service must have a system in place to rotate or replace them. Lastly, biomedical devices, such as defibrillators must be checked periodically by specially trained personnel and there are costs associated with replacing batteries, pads, etc.

- What mandates are associated with the level of care proposed?

  In some cases, increasing the level of care requires the emergency medical service to meet requirements imposed by other agencies, often without additional funding. Examples include vaccinations, mandatory domestic violence awareness training and, for those checking blood sugar levels with a glucometer, the federal Clinical Laboratory Improvement Act, which is administered by the Health Care Financing Administration.

- What additional medical oversight will be required?

  While basic life support is often provided with little or no physician oversight, the provision of advanced life support requires, by statute and regulation, approval and review by a physician medical director.

- What, if any, additional organizational changes will be required.

[1] 7 AAC 26.010 – 7 AAC 26.999

Organizations require structure to be effective and sustainable. Bylaws, policies and procedures must be written, updated, or adapted to ensure that roles, responsibilities, and expectations are clear.

- Are data collection and evaluation processes in place to allow the success of the proposal to be determined?

  In order to effectively evaluate the success of the changes made, and to provide a basis for further improvement, the community should make sure baseline data are being collected. Data elements may include attrition rates, frequencies of skills used, patient outcome, etc.

Summary

Determining the appropriate level of emergency medical care for a community is a process which is essential to the longevity of its emergency medical services system. The process requires thoughtful consideration of key issues by appropriate leaders within the elected and medical communities and should be repeated when changes are proposed or when problems occur with recruitment and retention of personnel, patient care, or EMS related matters.

The payoff is a well run and well respected emergency medical services system supported by an appreciative and informed community.

SECTION 500
SPECIAL SYSTEM TOPICS

OVERVIEW

Within every **system** are items that stand out at the forefront. Although the whole is much greater than the sum of the parts in a functional system, there is a need to further examine parts with a special implication for the system. These items are examined here in the following nine sub-sections:

- **Section 510 – Air Medical Transport**
- **Section 520 – Communications**
- **Section 530 – Hazardous Materials**
- **Section 540 – Seasonal Impacts**
- **Section 550 – Quality Assurance and Continuous Quality Improvement**
- **Section 560 – Injury Prevention and Control**
- **Section 570 – EMS for Children**
- **Section 580 – Trauma Care System**
- **Section 590 – Trauma Registry**

This section's intent is to provide a short explanation of these topics. If you need to know more about these areas, contact the State EMS Office.

510 Air Medical Transport

This section provides an overview of the certification levels for medevac and air ambulance services, and types of air medical services in Alaska. The *Alaska Medevac Manual,* , available from the State EMS Office provides additional information. It is important to note that the Federal Aviation Administration has specific authorities for some aspects of air medical care, including pilot hours and the certification of aircraft to transport non-ambulatory patients or patients requiring medical equipment.

511 Certification Levels

Statistics show that critically ill or injured patients in rural areas have higher mortality rates than those in urban areas. To help reduce these mortality rates, prompt EMS response and rapid transport to a medical center is needed. In many parts of Alaska, such as wilderness and coastal areas, ground transport to a medical center is impossible. The only possible rapid transportation for many patients is air transportation.

The State of Alaska has adopted regulations for three levels of air medical services (*7 AAC 26.310- 7 AAC 26.390*).

The three levels are: **Medevac Service, Critical Care Air Ambulance Service,** and **Specialty Aeromedical Transport Team**. Services advertising the provision of air medical services, or routinely providing advanced life support air medical services, are required by state statutes and regulations to become certified. Each level must have a physician medical director responsible for the medical personnel and for review of patient care. The requirements for **medical personnel, aircraft, medications,** and **medical equipment** become more advanced with each level of service.

The purpose section states, "*It is not the intent of (these regulations) to prohibit transportation of emergency medical patients via any private aircraft, air taxi service, commercial airline, or government aircraft when it is in the best interest of the patient and no certified service is available within a reasonable period of time, as determined by the medical attendant with the patient. Rather, the intent is to prescribe minimum standards for air medevac services, air ambulance services, or specialty aeromedical transport teams that provide, offer or advertise to provide emergency medical care that includes advanced life support services and transportation of sick or injured patients as a routine service*."

512 Types of Transports

There are different types of air medical services depending on the location of the patient. The three major types or tiers found in Alaska are described here. Each tier has special considerations.

512.1 Tier 1

A **Tier 1 Air Medical Service** is one that is usually done from a village, town, or remote site to the nearest regional hospital. Many regional

hospitals **do not** have tertiary care units, but they can provide primary and secondary emergency care. Examples of hospitals in this category include those in Bethel, Kotzebue, and Barrow, as well as other small hospitals throughout the state.

512.2 Tier 2

Tier 2 Air Medical Service refers to the transport of a patient from a regional hospital to a referral center. Referral centers include, but are not necessarily limited to, the Alaska Native Medical Center, and Providence and Alaska Regional Hospitals in Anchorage, and Harborview Trauma Center in Seattle. These patients require intensive care, surgical services, or specialty services not available at most local or regional hospitals.

512.3 Tier 3

Tier 3 Air Medical Service are those originating from the tertiary care center and ending in a specialized hospital such as a major burn unit or Level I trauma center not available in Alaska. Arrangements for these air medical services are initiated by the tertiary care centers. It is rarely appropriate for a patient to go directly from a village or regional hospital to one of these specialized care facilities, due to the long distances to these specialized facilities. Patients often need initial stabilization and evaluation provided at a regional hospital or tertiary care center.

520 Communications

Communications refers to:

1. The means by which individuals activate or access the EMS system;
2. The ability to dispatch appropriate emergency response personnel and vehicles and to give pre-arrival instructions to callers;
3. The ability of prehospital EMS personnel and hospital medical staffs to communicate with each other within the system; and
4. The capability of emergency care providers within the system to communicate with other agencies, community resources, and the public when required.

521 Communications System Components

Prehospital medical care systems must interact with various groups to provide optimal services. To accomplish this, the EMS system must have a coordinated system for communications. Components of the communications system include:

- Access and dispatch;
- Fire, police, other EMS units, and special rescue units;
- Disaster networks; and
- Medical direction and hospital services.

Each of these components is highlighted here.

521.1 Access and Dispatch

An EMS communications system must provide a mechanism so that anyone with an urgent medical need can easily and reliably access emergency medical care. Telephone lines are the most common and reliable. A universal emergency number, 911, for access to all emergency providers, continues to be maintained and implemented with federal, state, and local government support. In those areas without 911 service, access to the emergency system should be made as easy as possible with a well-posted, easy-to-remember, single telephone number. Emergency call boxes, citizen band radios, cellular phones, marine radios, satellite phones or dedicated land lines are other EMS access options. **911 Enhanced**, also known as **911-E**, is an advanced version of the 911 system that includes automatic number identification, automatic call identification, and automatic ring back.

Dispatch is performed by a pre-designated person, the emergency medical dispatcher (EMD). Typically, the EMD is located in the communications dispatch center and has several responsibilities. The EMD:

1. Determines the urgency of the call,
2. Provides pre-arrival instructions to the caller, and
3. Determines the type of response required.

EMDs need to be able to access and dispatch all available resources. Under ideal circumstances

an emergency vehicle should be dispatched in less than 60 seconds.

The Department of Health and Social Services maintains a system (7 AAC 26.810 – 26.840) for the certification of emergency medical dispatchers.

521.2 Fire, Police, EMS and Rescue Response

A centralized communications center (public safety answering point) is the cornerstone of a system providing coordinated emergency services for daily community needs and for special circumstances, such as multiple casualty incidents and disasters, hazardous materials incidents, and special rescue situations. It is desirable for EMS, police, fire, and other rescue personnel to have direct communications capabilities with each other regarding additional personnel or equipment, logistical issues, and to better coordinate responses.

521.3 Medical Direction and Hospital Personnel

Prehospital personnel need to communicate directly with hospital personnel. Medical direction through voice communications between physician and EMT may be by telephone, but usually involves radio communications. Selection of radios for hospital-to-ambulance communications must take into consideration transmission interference and distances. Medical direction is best provided by experienced physicians who are immediately available for medical consultation. When direct voice communication is not possible, the receiving hospital should be notified through the dispatcher of the patient's condition, expected time of arrival, and other pertinent data that will make the facility better able to respond upon arrival of the patient. Hospitals should be capable of communicating with other hospitals within the system regarding the availability of beds and other resources. This is a necessity during disasters when the triage and transportation of many ill injured victims is necessary.

521.4 Disaster Networks

Communication procedures to be used during a disaster should be well identified so that resources can be coordinated under stress. Backup procedures and equipment should be available in the event of failure of communication components. The ability to override components of the communications system, to block out nonessential communications, must exist as well.

Along with its federal partners, the State of Alaska is engaged in an ambitious project that holds great promise for functionality and interoperability. The Alaska Land Mobile Radio Project uses digital VHF trunking to connect radio users by agency or "talk group." The ALMR project will be implemented in phases. The CHEMS web site has links to important information about this project.

530 Hazardous Materials

Hazardous materials incidents have increased virtually everyone's awareness of hazardous materials (hazmat) and the dangers they pose. Concerned about the potential harm that industrial chemicals can cause, the public has demanded preparedness and protection for incidents involving hazardous materials. Laws and standards have been established to address this concern.

531 SARA Title III

Intending to prevent Bhopal-type catastrophes in the United States, Congress passed the **Emergency Planning and Community Right-to-Know Act (EPCRA)** in 1986. EPCRA is also known as **Title III** of the **Superfund Amendments and Reauthorization Act (SARA)**. This federal law has two broad purposes:

1. To encourage communities to develop emergency plans for chemical releases, and
2. To give citizens access to information about the risks both to human health and the environment, posed by hazardous materials present in their community.

To accomplish this, the federal law requires establishing Local Emergency Planning Committees (LEPC) and State Emergency Response Commissions (SERC). These groups serve as the vehicles for developing local response plans and making information about chemical hazards available to the public. The federal law also requires certain facilities to report information about hazardous materials and requires some of these facilities to participate in local response planning.

In 1987, the Governor established the Alaska State Emergency Response Commission (SERC). Since then, the SERC has worked towards implementing the Emergency Planning and Community Right-to-Know Act in accordance with the federal law.

532 Alaska SERC

1990 legislation established the Alaska State Emergency Response Commission in state law.

AS 46.13:

1. Requires the SERC to oversee the implementation of SARA Title III in Alaska,
2. Broadens the definition used in the federal law of hazardous substance to include other hazardous substances and oil, and
3. Broadens the SERC's role, giving it the responsibility for ensuring that local, regional, and statewide contingency plans are well-integrated and coordinated with other applicable plans such as the National Contingency Plan, other federal plans, and facility and vessel contingency plans.

The Commission oversees planning and response for **all hazards**, both natural and technological. The SERC's program support was transferred from the Department of Environmental Conservation to the Division of Emergency Services, Department of Military and Veterans Affairs. While oil and hazardous substance response depots remain the responsibility of the Department of Environmental Conservation, with the implementation, DMVA has responsibility for emergency response caches for all hazards. DEC and DMVA will cooperate and not duplicate efforts when placing depots and establishing corps of volunteers.

Since its beginning in 1987, the SERC has approved nearly two dozen Local Emergency Planning Committees (LEPCs) and corresponding Local Emergency Planning Districts (LEPDs

A list of LEPCs and LEPDs can be found on the Division of Emergency Services' web site at: http://www.ak-prepared.com

Staff from the Section of Community Health and EMS frequently represent the Commissioner on the SERC.

533 OSHA 1910.120

The federal Occupational Safety and Health Administration (OSHA) requires training for all employees who participate in emergency response to hazardous substances incidents. More comprehensive requirements for training and other safety programs were published in 1989 as part of *OSHA 1910.120*. That standard regulates "*the safety and health of employees in…any emergency response to incidents involving hazardous substances*." EMS personnel are specifically listed among those who must be trained. The actual training should be tailored to fit the work that individuals are expected to carry out.

The OSHA standard gives detailed descriptions of the training required for emergency responders. A four-tiered training system is presented. Each tier corresponds to a different level of emergency-response performance and skills. The performance levels correspond to different roles during an incident. The four levels include:

1. First-responder awareness,
2. First-responder operations,
3. Hazardous materials technician, and
4. Hazardous materials specialist.

534 NFPA 473

The National Fire Protection Association (NFPA) issued standard, *NFPA 473*, that **recommends** competencies for EMS hazmat responders beyond the **required** federal OSHA regulation. NFPA's Technical Committee on Hazardous Materials Response Personnel prepared *NFPA 473, Standard for Competencies for EMS Personnel Responding to Hazardous Materials Incidents*.

This standard identifies the levels of competence required of emergency medical services personnel who respond to hazardous materials incidents. It specifically covers the requirements for **basic life support** and **advanced life support** personnel in the **prehospital setting**. Competencies for EMS hazmat responders are provided at two levels. Level I responders function in the cold zone. Level II responders function in the warm zone. (The area involved in a hazardous materials release response is divided into three zones. The hot zone is the

area immediately surrounding a release source; it is the area where contamination does or can occur. The warm zone is the decontamination area and hot zone support area. The cold zone is the support area for the warm zone; it is also known as the clean area.) These standards are **recommendations** for minimum requirements of competence and to enhance the safety and protection of response personnel and all components of the emergency medical services system. It is not the intent of this standard to restrict any jurisdiction from exceeding these minimum requirements.

535 Alaska's Situation

Potentially dangerous materials are manufactured, stored, and transported in Alaska. These materials do not present a threat in controlled environments; however, unintentional releases can result in a hazardous situation. Several major highways, the Trans-Alaska Pipeline, and various marine transport routes (such as the Inside Passage in Southeast Alaska) are all major hauling routes with the potential for an incident involving hazardous materials. An increasing number of methamphetamine laboratories, which pose major hazardous materials hazards, are being discovered by law enforcement personnel.

EMS personnel are frequently the first trained responders to arrive at the scene of an incident involving hazardous materials. The hazmat capabilities of EMS agencies vary across the state, and are often related to the availability of a fire department hazmat team. A major dilemma is that EMS services in the smallest communities often depend upon volunteer staffs, have minimal immediate hazmat backup, and may require temporary, self-sufficient response capabilities for hazmat incidents. Fortunately, the smaller communities are likely to have the fewest hazardous substances and are likely to be more aware of the hazards that do exist.

Through separate memoranda of agreement, hazardous materials teams from the Anchorage Fire Department and the Fairbanks Fire Department are authorized to travel outside their community boundaries to provide mutual aide when necessary.

536 EMS Involvement in Hazardous Materials

There are three ways EMS personnel can be involved in the hazmat effort.

536.1 Planning

The SERC is required by law to appoint Local Emergency Planning Committees (LEPC) for each LEPD. LEPC members represent a broad cross-section of a community. The thirteen membership categories include: elected officials, law enforcement, civil defense/emergency management, firefighting, **first aid, health, hospital**, local environmental, transportation, broadcast and print media, community groups, facilities, and public.

LEPCs are responsible for developing **local emergency response plans** for oil and hazardous substances releases within their LEPD. According to SARA, those plans should *include methods and procedures to be followed by…local emergency and medical personnel to respond to any release…* (*PL 99-499, §303 (c)(2)*). In addition, plans should contain *training programs, including schedules for training of local emergency response and medical personnel* (*PL 99-499, §303(c)(8)*).

Active involvement by EMS personnel in each LEPC will help ensure that EMS concerns are adequately addressed. Interested EMS personnel should contact their local government or the Alaska Department of Environmental Conservation to learn more about this community-oriented program.

An excellent source of information about Local Emergency Planning Commissions is the Alaska Division of Emergency Services within the Department of Military and Veterans Affairs. Its comprehensive web site (www.ak-prepared.com) has contact information for all of the LEPCs in Alaska.

536.2 Training

The current hazmat training efforts of many EMS systems focus on the **awareness level**. Some services, however, recognize that their EMS personnel may be placed in the role of an incident commander during the initial phases of the event and have opted to provide more advanced training. The State EMS Office recommends that:

1. All EMS providers who work for an organized emergency medical service agency be trained to the Hazardous Materials First Responder Awareness level;
2. EMS agencies should be required to develop written hazardous materials policies which clearly define the intended hazardous materials response capabilities of the organization, based on perceived risks, and those risks identified through SARA Title III, community right-to-know, and transportation of hazardous materials activities;
3. EMS agencies should be required to provide hazardous materials training to allow them to meet their proposed hazmat capabilities in accordance with applicable Occupational Safety and Health requirements; and
4. A module containing the essential information in *National Fire Protection Association 473* be presented to EMS providers working for organized emergency medical services agencies who will be called upon to respond to hazardous materials incidents.

536.3 Resources

The *Specialty Services* section of the *Alaska Emergency Medical Services Directory* contains a *Hazardous Materials* sub-section. Information sources on **Chemicals Identification, Emergency Response,** and **Hospitals with Improvised Decontamination Facilities** are listed. Here. Hazmat publications listed in **Section 724** are also available from the State EMS Office.

Alaska currently does not have all the resources to be adequately prepared for a hazmat response. The State EMS Office recommends that local and state government, and concerned citizen groups, support the acquisition of the following hazmat equipment:

1. Basic decontamination equipment for all first responder and ambulance services (see **Section 730**);
2. Basic decontamination equipment in all acute care hospitals (see **Section 735**);
3. Materials to protect all aircraft, ambulances, and other vehicles used for EMS-related transport from contamination (see **Section 730**);
4. Special decontamination equipment for first responder and ambulance services responding in areas with sub-zero temperatures; and
5. A listing of medical resources, including hospital emergency departments and the poison center, which can provide consultation and treatment for patients who are exposed to extremely hazardous chemicals.

540 Seasonal Impacts

541 Population-Related Impacts

Many Alaskan communities experience extreme seasonal fluctuations due to the influx of tourists and/or seasonal workers. This can make planning for emergency medical services difficult. In such circumstances, a community should estimate its equipment needs by identifying the level of community (such as Level II Isolated) associated with its peak population. In the event that a direct equivalent cannot be found, the next highest level community designation should be considered for planning purposes.

Personnel needs also should be estimated based on equivalent community designations. For example, a community whose population increases from 2,000 to 6,000 during fishing season should consider increasing its prehospital EMS personnel from Level II to Level III recommendations during the peak season.

542 Climate-Related Impacts

Alaska's climate, known for its extremes and severity, impacts the delivery of emergency medical services.

Climate impacts the EMS system in a number of ways. Weather creates conditions that increase the likelihood of a person requiring emergency medical services. For instance, an arctic hunter on a winter trip may get caught in a sudden storm. Even with appropriate survival gear, there is a risk for hypothermia and frostbite given the potential for extreme cold and wind conditions.

Weather also slows down EMS response and transport times. Inclement weather, such as fog, high winds, driving rain, and heavy snow, results in frequent airplane groundings and

overheadings at many of the state's airports. This is a problem since scheduled, charter, and private aircraft on wheels, floats, and skis form the principle mode of transportation statewide. Major highways are sometimes blocked by avalanches, preventing passage of vehicles including ambulances. Therefore, EMS providers in rural areas and small towns in Alaska have to be prepared to take care of an injured or ill patient for much longer periods of time than EMS providers in most other parts of the country.

550 QA and CQI

This section highlights quality assurance and continuous quality improvement principles and discusses their applications for Alaska's EMS program.

552 Quality Assurance

Traditionally, medical care has been evaluated using three categories of indicators: structure, process, and outcome. Indicators reflect critical points or issues in providing care. They are called indicators as they reflect good or bad outcomes. Structural indicators evaluate whether or not the physical capacity exists to provide care. Process indicators evaluate the way care is provided. Outcome indicators evaluate the end result.

553 Continuous Quality Improvement

Continuous quality improvement is a cyclic, problem-solving process, concerned with reducing **variation**. In reference to the bell-shaped curve, reducing variation brings the ends of the curve closer to the mid-point or standard. Once variation is reduced, the standard is moved to the right, or improved, and the process starts all over again. The basis of this approach is a statistical process control system.

Reducing variation results in stable, predictable performance and output uniformity. There are two approaches for reducing variation: standardization and process control **Standardization** gets everyone to use the same procedures, materials, equipment, and so on. **Process control studies** process as it currently operates, looks for potential sources of variation, identifies causes for variation, and makes incremental changes to test the effect on the variation.

554 Applications

In Alaskan communities evaluating the quality of emergency medical care is done in two ways.

The first method, **case audit**, involves direct interaction of providers. In all community levels (Level I, II, III, and IV communities) the EMS system has interactions between the EMS provider (EMT, CHA, MICP, PA, or NP) and the physician medical director. Quality assurance is a function of the collaborative agreement between the prehospital providers and their physician medical director. The interaction can be in person or via radio or telephone. Regular run reviews, done to determine whether care and transfer were performed appropriately and in accordance with local, regional, and state guidelines, is another form of the case audit.

The second method, **quality assurance studies**, is a formal process carried on in hospitals and other health-care organizations. Staff in a quality assurance program conduct QA activities that are often mandated by statute or third-party payer requirements. The second method occurs in Level III, IV, and V communities. Databases, such as the Alaska Trauma Registry and the Ambulance Survey, are useful tools for these studies.

In Level III, IV, and V communities, the health care system consists of individual providers and groups or organizations providing health care in two settings: the community (prehospital and post-hospital) and the hospital. Quality of care evaluation is usually done with quality assurance, although continuous quality improvement is appropriate as well.

In fact, CQI can be done at any community level. Again, databases, such as the Alaska Trauma Registry and the Ambulance Survey (see **Sections 230** and **590**), are useful tools for these processes. Data gathered through the Trauma Registry provides hospital and prehospital services with valuable information about the quality and appropriateness of treatment as well as training, personnel, equipment, and budgetary needs

Quality improvement activities are critical to the development of emergency medical services in Alaska and should be built in wherever possible.

560 Injury Prevention and Control

561 Injuries in Alaska

Unintentional injuries are the leading cause of death of Alaskans aged 1-44 years and the third leading cause of death for Alaskans overall. Because unintentional injuries cause the deaths of so many young people, more years of potential life are lost from injuries than from any other cause of death. Alaska has the distinction of having the one of the highest injury rates in the nation.

The categories of injuries most prevalent in Alaska are closely related to the high-risk conditions and activities in the state. Alaska is a land of abundant waters, rugged terrain, and extreme climates; consequently ice, darkness, cold, rural roads, limited access to medical care, reliance on a variety of vehicles (boats, airplanes, off-road vehicles), and use of wood stoves and other alternative heating sources contribute to high injury death rates. Alaska's population is younger than the national population, and cultural differences influence behavior. Some believe Alaskans to be characterized by a uniquely independent and adventurous spirit. Additional risk factors for injury are the high rates of alcohol abuse and the abundance of firearms in Alaska. It is within this environment that injury has emerged as Alaska's number one health problem.

Injuries causing the greatest number of fatalities in Alaska are suicide, motor vehicle, homicide, drowning, airplane crash, poisoning, falls, fire, hypothermia and suffocation. The leading causes non-fatal hospitalized injuries are falls, suicide attempts, highway motor vehicle, assault, off-road motor vehicle, sports, cuts, and bicycle.

562 Injury: A Public Health Problem

Injury causes significant mortality and morbidity, as well as pain and suffering, and also causes major direct and indirect costs. Premature death due to injury is extremely costly, accounting for an estimated average annual loss of 34 years of potential life per death.

Public health programs can significantly reduce the injury problem in the same way they tackle disease, by studying the causes and then using education, environmental changes, and laws to reduce the incidence The public health approach to reducing injury consists of 1) defining the problem; 2) identifying the target population, risk factors, and protective factors; 3) finding out what programs work; and 4) implementing and evaluating programs.

563 Injury Prevention and Control Program

The Injury Surveillance and Prevention Program (ISAPP) of the EMS Unit serves as the Division of Public Health's lead agency in efforts to reduce injury in the state. This program has adopted the Safe States Model for a State Injury Prevention Program, which consists of the following components: 1) data collection and analysis; 2) program design, implementation, and evaluation; 3) coordination and collaboration; 4) technical support and training; and 5) public policy.

Within this framework ISAPP has focused efforts on: improving injury data and making it available for program planning; finding programs that work and can be adapted to Alaska; supporting pilot projects with funding and technical support; evaluating programs; replicating successful community programs; active collaboration with injury prevention partners across the state; building injury prevention capacity among health professionals and health providers and public health agencies through training and technical support; and providing bill analysis and other information on proposed legislation.

564 Injury Prevention Resources

Numerous agencies offer injury prevention education and program activities in Alaska. Most agencies limit their activities to a particular population, geographic area, or a few categories of injury. Alaskan organizations offering or supporting injury prevention are listed in the annual *Alaska EMS*. The state's Injury Surveillance and Prevention Program maintains a list of current programs and activities, as well as contact names on its web site at http://www.chems.alaska.gov.

565 Code Blue Program

For over a decade, a crisis developed in rural Alaskan EMS programs resulting in some services closing their doors and others downgrading the level of emergency medical care they are capable of providing. These EMS agencies are essential components of the rural emergency health care and transportation systems. The Code Blue Project was initiated by the Department of Health and Social Services in 1999 as an attempt to quantify the unmet equipment needs of rural emergency medical services agencies. In addition to the department, the process has involved the Governor's Alaska Council on Emergency Medical Services, Regional and Subarea EMS Agencies, and local EMS programs. The Code Blue Database includes EMS equipment needs supported by Regional EMS agencies and represents a "snapshot" of documented needs in rural Alaska.

The Regional EMS Offices, working with the Section of Community Health and EMS and local communities, develops applications for funding based on regional assessments. For more information, contact the regional EMS council.

570 EMS for Children

Children have different needs than adults. Since EMS systems were originally conceived and implemented by medical specialists with an orientation toward the adult patient, they did not adequately address the special needs of the pediatric patient. For instance, some aspects of the EMS system have been shown to reduce morbidity and mortality for adults but not for children. EMS for Children (EMSC) is a national initiative designed to reduce child and youth disability and death due to severe illness and injury.

The Emergency Medical Services for Children (EMSC) Program began awarding grants to states in 1985 to support state and local initiatives to improve the care and treatment of children within the current EMS system. The initial goal of the program is to prevent childhood illness or injury. When prevention fails, EMSC wants to ensure that all ill or injured children and adolescents receive state-of-the-art emergency medical care from emergency medical technicians (EMTs) and paramedics, emergency department personnel, and rehabilitation specialists, if needed.

The program started in Alaska with the first grant in 1989. Since that first grant we have had two state partnership grants, two injury focused grants and a special grant to focus on Alaska Native children.

Some of the accomplishments over the years include:

- EMCS State Achievement Award, 2000.
- 19 injury prevention projects;
- a two-day "Pediatric Pre-hospital Care" instructor course;
- a two-day Pediatric EMS Symposium;
- an EMT continuing education course delivered to rural communities;
- a three-day "Emergency Care Training for School Nurses" presented to public school nurses;
- two-three day "hands-on" preceptorship programs provided to pre-hospital EMS personnel at the hospitals in Anchorage;
- development and distribution of the *Alaska Medevac Manual*, this manual has recently been updated and is in its fourth edition;
- surveys addressing EMSC capabilities in Alaska;
- purchase and distribution of pediatric equipment to volunteer EMS first responder and ambulance services, and community health aide clinics;
- a survey of rural Alaskan hospitals and health clinics, resulting in the identification of problems with discharge planning for children discharged from urban hospitals to small, rural communities and development of a pediatric discharge planning process;
- support for a statewide trauma registry;
- various pediatric instruction to hospital personnel in rural hospitals;
- development and distribution of a *Family Resource Guide*, for use by parents of children with disabilities; and
- purchase of computer interactive video training for EMS pre-hospital personnel;
- establishment of a Suicide Prevention Task Force who lead a research project to profile youth at risk of suicide and "Gatekeeper" training designed to train people from local communities to recognize the warning signs

of potential suicide and to respond appropriately to those warning signs;
- development of an EMSC training plan;
- first state to present the new pediatric training course, Pediatric Education for Prehospital Professionals (PEPP), after the national rollout in March 2000;
- development of pediatric-specific emergency medical dispatch protocols;
- subsidizing Emergency Trauma Technician (ETT) training in rural high schools and development of a guide to assist ETT instructors interested in teaching the course in their community high school;
- sponsoring Pediatric Advanced Life Support (PALS) and Emergency Nurse Pediatric Courses (ENPC) in rural Alaska;

The Section of Community Health and EMS maintains a page on its web site that includes detailed information on current program activities

580 Trauma Care System

581 Traumatic Injury and Public Health

Trauma refers to bodily injury and encompasses a wide range of severity. Trauma is a public health problem in Alaska. Traumatic injury, both intentional and unintentional, is the leading cause of death in the first five decades of life in our state, and many Alaskans also sustain long-term disability as a result of injury.

582 Federal Planning Initiative

To enhance trauma system development, the United States Congress passed the Trauma Care System Planning and Development Act of 1990. This legislation emphasized the recognition of injury as a public health problem and required the development of *the Model Trauma Care System Plan* for states to use as a reference guide in the development of a comprehensive trauma care system plan.

The structure of a trauma care system involves a number of **components** and **providers**, each of which must be adapted to a specific environment, whether it be urban or rural. The components and providers have been well established by recognized guidelines. The **American College of Surgeons Committee on Trauma (ACSCOT)** and the **American College of Emergency Physicians (ACEP)** have criteria establishing the minimum requirements for trauma centers and trauma systems. The **National Highway Traffic Safety Administration** has produced a community guide for trauma system development and has provided technical assistance teams to help state emergency medical services agencies with trauma system development.

583 An Inclusive Trauma Care System

An inclusive trauma care system requires a comprehensive plan that encompasses all aspects of trauma care for both major and minor injuries, as well as a plan for prevention, training and system evaluation. All well functioning inclusive trauma plans should be supported by appropriate financing, legislation, and leadership. The crux of understanding an inclusive trauma plan is to realize that 90 percent of all trauma victims do not require care at a Level I or Level II Trauma Center. The goal of an inclusive system is to match the injured victim's medical needs with the medical resources available. Victims with minor injuries can receive definitive care at clinics and non-surgical facilities.

The *Model Trauma Care System Plan* encourages the formation of an inclusive trauma system. Fourteen components, which can be clustered into three groups, are essential for this inclusive system.

The first group consists of the central core of operation components that provide direct patient care once an injury occurs. The response requires the use of coordinated **communication** mechanisms, accurate identification of the level of care needed by the injured patient (**triage** and **medical direction**), rapid **transport** and **transfer** to an appropriate **facility**, and the integration of support services, such as **rehabilitation**, to return the patient to a productive life in the community.

The second group consists of **injury prevention** to target the public and reduce the number of patients ultimately needing trauma care; **training** of providers to ensure optimal patient care; and **evaluation** to monitor, maintain, and improve the system.

Finally, the third group contains the administrative components of the trauma care system. These include **leadership**, planning and **system development**, **legislation**, and **finance**. These components promote ongoing system development and enhancement.

590 Alaska Trauma Registry

591 Purpose

The Alaska Trauma Registry is a computerized information system of the most seriously injured patients and the treatment that they have received. The purpose of the Registry is to evaluate the quality of trauma patient care and the effectiveness of the trauma care system, and to plan and evaluate injury prevention programs. Since January of 1991 the Trauma Registry has collected data from all twenty-four of Alaska's acute care hospitals on every trauma admission, hospital death or transfer.

Data gathered through the Trauma Registry provides hospitals and prehospital services with valuable information about the quality and appropriateness of treatment as well as training, personnel, equipment, and budgetary needs. The Trauma Registry information also serves the Injury Surveillance and Prevention Program, Emergency Medical Services Unit, and other agencies when planning and evaluating injury prevention programs, public education, EMS training, and legislative action.

592 Inclusion Criteria

The criteria for inclusion in the Registry are patients with injuries described by ICD-9 CM diagnosis codes 800.00-995.89 for injury and poisoning, including the effects of reduced temperature and drowning/near drowning, that are admitted to the hospital, transferred to a higher level of care, or declared dead in the emergency department. Data is abstracted from hospital records after patient discharge, and includes information on patient demographics, circumstances of injury, prehospital and in-hospital response times and treatment, severity of injury, diagnosis, length of hospital stay, cost of hospitalization, and discharge condition.

593 Confidentiality of Trauma Registry Data

The confidentiality of Trauma Registry data is protected under *AS 18.23.010-070*. Under state statute, data acquired by a review organization, in the exercise of its duties or functions, is not subject to subpoena or discovery. The Trauma System Review Committee, comprised of at least 75 percent health care providers, serves as this organization and meets quarterly.
All Trauma Registry personnel sign a confidentiality statement. There are no patient identifiers. Physicians, hospitals, clinics, and ambulance services are coded during data entry. Information is released to requesting agencies in aggregate form except through application for release of data for public health studies.

The Trauma System Review Committee guides operations of the Alaska Trauma Registry, approves release of data requests, reviews data to improve trauma patient care, and addresses trauma system issues.

SECTION 600 COMMUNITY RECOMMENDATIONS

OVERVIEW

This plan recommends guidelines for a system based on the framework outlined in **Section 400**.

The framework uses eight community classifications. These include:

- **Section 610 – Level I Isolated Villages**
- **Section 620 – Level I Highway Villages**
- **Section 630 – Level II Isolated Sub-Regional Communities**
- **Section 640 – Level II Highway Sub-Regional Communities**
- **Section 650 – Level III Regional Centers**
- **Section 660 – Level IV Small Cities**
- **Section 670 – Level V Urban Centers**
- **Section 680 – Others**

Population figures used for community classification are from the 2002 population estimates from the Research and Analysis Section, Alaska Department of Labor.

SECTION 610
LEVEL I
ISOLATED VILLAGES

OVERVIEW

This section contains the specific EMS recommendations for **Level I Isolated Villages**. (See **Section 410** for the definition of a Level I Isolated Village.) The recommendations are organized in a fourteen-component framework described in **Section 430**.

The section is divided into two subsections. Communities classified as **Level I Isolated Villages** are listed in **Section 611**. The recommendations are shown in **Section 612**. Refer to **Section 440 – Prehospital/Hospital/ Post-Hospital Index** to determine how these recommendations relate to hospital care.

Level I Isolated Villages provide basic life support emergency medical services to all people at all times within the village as well as patient discharge or transport to a higher level of care according to state standards.

611 Community Listings

INTERIOR REGION

Alcan
Allakaket
Anderson
Arctic Village
Beaver
Bettles
Cantwell
Central
Chalkyitsik
Chicken
Circle
Circle Hot Springs
Coldfoot
Denali Park
Dot Lake
Dry Creek
Eagle
Eagle Village
Eureka
Evansville
Ferry
Harding Lake
Healy Lake
Hughes
Huslia
Kaltag
Koyukuk
Lake Minchumina
Lignite
Livengood
Manley Hot Springs
McKinley Park
Minto
Nikolai
Northway
Northway Junction
Northway Village
Nulato
Port Alcan
Rampart
Ruby
Stevens Village
Takotna
Tetlin
Venetie
Wiseman

NORTH SLOPE REGION

Anaktuvuk Pass
Atquasuk
Kaktovik
Nuiqsut
Point Hope
Point Lay
Wainwright

NORTHWEST ARCTIC BOROUGH

Ambler
Buckland
Deering
Kiana
Kivalina
Kobuk
Noatak
Noorvik
Selawik
Shungnak

NORTON SOUND REGION

Brevig Mission
Diomede
Elim
Gambell
Golovin
Koyuk
Port Clarence
Saint Michael
Savoonga
Shaktoolik
Shishmaref
Stebbins
Teller
Wales
White Mountain

SOUTHEAST REGION

Angoon
Coffman Cove
Covenant Life
Edna Bay
Elfin Cove
Excursion Inlet
Game Creek
Hollis
Hydaburg
Hyder
Kake
Kassan
Klukwan
Kupreanof
Meyers Chuck
Mosquito Lake
Naukati Bay
Point Baker
Port Alexander
Port Protection
Rowan Bay
Tenakee Springs
Thom's Place
Whale Pass

SOUTHERN REGION

Aleutian/Pribilof Subarea

Atka
Cold Bay
False Pass
Nelson Lagoon
Nikolski

Bristol Bay Subarea

Chignik Lagoon
Chignik Lake
Clark's Point
Egegik
Ekwok
Goodnews Bay
Igiugig
Iliamna
Ivanof Bay
King Salmon
Kokhanok
Koliganek
Levelock
Manokotak
Newhalen
New Stuyahok
Nondalton
Pedro Bay
Perryville
Pilot Point
Platinum
Port Alsworth
Port Heiden
South Naknek
Twin Hills

Copper River Subarea

Chistochina
Chitina
Copper Center
Copperville
Eureka
Gakona
Gulkana
Kenny Lake
Lower Tonsina
Mendaltna
Nabesna
Nelchina
Paxson
Slana
Sourdough
Tazlina
Tolsona
Tonsina

Kenai Peninsula Borough Subarea

Halibut Cove
Jakolof Bay
Tyonek

Kodiak Island Borough Subarea

Akhiok
Chiniak
Larsen Bay
Old Harbor
Ouzinkie
Port Lions

Mat-Su Borough Subarea

Alexander
Chase
Lake Creek
Skwentna

Prince William Sound Subarea

Chenega
Falls Bay
Nanwalek
Port Graham
Tatitlek

YUKON-KUSKOKWIM REGION

Akiachak
Akiak
Alakanuk
Anvik
Atmautluak
Chefornak
Chevak
Chuathbaluk
Crooked Creek
Eek
Emmonak
Grayling
Holy Cross
Hooper Bay
Kalskag
Kasigluk
Kipnuk
Kongiganak
Kotlik
Kwethluk
Kwigillingok
Lime Village
Lower Kalskag
Upper Kalskag
Marshall
Mekoryuk
Mountain Village
Napakiak
Napaskiak
Newtok
Nightmute
Nunapitchuk
Oscarville
Pilot Station
Pitkas Point
Quinhagak
Red Devil
Russian Mission
Saint Mary's Scammon Bay
Shageluk
Sheldon Point
Sleetmute
Stony River
Toksook Bay
Tuluksak
Tuntutuliak
Tununak

612 RECOMMENDATION

1 PERSONNEL

A ADMINISTRATION

Every **Level I Isolated Village** should have:

1. A person identified to coordinate EMS activities.
2. Documented periodic meetings of local EMS providers, such as Community Health Aides (CHAs), Community Health Practitioners (CHPs), Village Public Safety Officers (VPSOs)/Village Police Officer (VPO), Search and Rescue (SAR) personnel, Emergency Trauma Technicians (ETTs), or Emergency Medical Technicians (EMTs), to review responsibilities and coordinate activities.
3. Quarterly contact with regional or subarea EMS coordinator.
4. Input into a regional/subarea EMS plan.
5. A plan for accessing Critical Incident Stress Management (CISM) for providers as indicated.

B PROVIDERS

I Prehospital Emergency Providers

Every **Level I Isolated Village** should have:

1. Available at all times, an identified emergency care provider (such as the community health aide):
2. Community responders trained to at least the ETT level, but preferably to the EMT-I level.
    - Trained in medical communications as appropriate for local resources.
    - Trained in techniques for packaging patients for delayed/prolonged transport.
3. Access to medical consultation from higher level community at all times.
4. Those communities with an extensive roadway system should have an organized first responder service with personnel trained to at least the Emergency Trauma Technician level, but preferably the EMT-I level.

II Air Medical Services

Every **Level I Isolated Village** should have:

1. Access to a state certified medevac service.

III Clinic Providers

Every **Level I Isolated Village** should have:

1. CHA/Ps trained to at least the EMT-I level with additional training in, pediatric emergencies, oxygen therapy, IV fluid and defibrillation skills.

IV Injury Prevention

Every **Level I Isolated Village** should have:

1. A designated community or regional injury prevention specialist.
2. Knowledge of, and access to, the national poison control number.

V Public Safety

Every **Level I Isolated Village** should have:

1. All search and rescue personnel trained to at least the basic first aid level.
2. All law enforcement officers and firefighters trained to at least the basic first aid level.

2 TRAINING

A STANDARDS

Every **Level I Isolated Village** should have:

1. Basic and advanced training programs for all levels of prehospital and clinic care providers including pediatric and trauma care.
2. All emergency medical services personnel trained to applicable local, state, and national standards regarding hazardous materials, bloodborne pathogens, incident command system, emergency vehicle operations, and confined space.
3. For all emergency responders in the community, an ongoing training and continuing education program adequate to

meet the recertification needs of all providers.
4. Access to distance delivered education through the internet and television.

B PREHOSPITAL TRAINING PERSONNEL

Every **Level I Isolated Village** should have:

1. At least one First Aid and CPR Instructor.

3 COMMUNICATIONS

A LOCAL/REGIONAL SYSTEMS

Every **Level I Isolated Village** should have:

1. A means for first responders or ambulance service personnel to contact the designated emergency care receiving facility.
2. A means for two-way communications among first responders or ambulance service personnel.
3. A means for two-way communications between first responders on the highway and the ambulance service covering their area if applicable.
4. A means for two-way communications among search and rescue personnel.
5. A means to dispatch first responders or ambulance service personnel at all times.
6. A current inventory of communications equipment.
7. A plan that incorporates current and local communications equipment with state and existing regional plans.
8. New equipment procurements coordinated with the regional office.
9. Emergency care providers trained in relay of medical communications, as appropriate to their local resources.
10. Posted communications procedures.

B STATE SYSTEM

C BACK-UP AND RELIABILITY

Every **Level I Isolated Village** should have:

1. A weekly test of the EMS communications system and a log which records the communications system's reliability.
2. Predetermined procedures for maintaining EMS communications equipment.
3. A backup system for direct two-way communications between designated emergency care providers and the hospital to which they refer patients.

4 PATIENT TRANSPORT/TRANSFER

A STANDARDS

Every **Level I Isolated Village** should have:

1. Copies of the current *Alaska Trauma Triage, Transport and Transfer Guidelines* for all emergency medical services and facilities.

B RESOURCES

I Ground Ambulances

Every **Level I Isolated Village** should:

1. Identify, in advance, a vehicle or other means available for patient transportation, and a person responsible for its maintenance. Ideally, it should have room for the patient to lie down, and a means to keep the patient and the emergency care provider sheltered.
2. Have immediate access to ground transport equipment and with pediatric emergency care equipment and medications as recommended in **Section 732-Ambulance Services**.

II Air Medical Services

Every **Level I Isolated Village** should have:

1. A maintained landing strip/area or float ramp for fixed-wing/rotary aircraft, with means to provide lighting for emergencies.
2. A designated person/agency responsible for ensuring landing area safety and storing runway lighting devices, if necessary.
3. Immediate access to an air transport kit including pediatric emergency care equipment and medications as recommended in **Section 733.1-Basic Equipment** and **Section 733.4-Pediatric Kits**.
4. Access, within a reasonable period of time, to a state-certified air medical service for transport and for transfer when appropriate. Alternate transport should be planned for

when these resources are unavailable or weather hinders their use.

C PROTOCOLS

Every **Level I Isolated Village** should have:

1. A plan for transporting patients based on the degree of injury, available equipment and the level of personnel available to accompany a particular type of transport (see *Alaska Trauma Triage, Transport and Transfer Guidelines*).
2. Established procedures for emergency air transport of adult and pediatric patients.
3. A system for retrieving equipment transported with the patient.
4. Posted procedures for patient transport.

5 FACILITIES, EQUIPMENT AND SUPPLIES

A FACILITIES

Every **Level I Isolated Village** should have:

1. A clinic or designated first aid station equipped to treat and stabilize emergency patients, with emergency care equipment and supplies, as recommended in **Section 734.1-Level I Community Clinics**.

B EQUIPMENT AND SUPPLIES

Every **Level I Isolated Village** should have:

1. Trauma kits readily available for first responders, equipped as recommended in **Section 731.1-First Responder Trauma Kit**.
2.
3. Equipment and supplies appropriate for training level of EMS providers.
4. Equipment and supplies for emergency care for both pediatric and adult patients as recommended in **Section 734.1-First Responder Trauma Kit**.
5. Predetermined procedures for maintaining equipment.

6 PUBLIC SAFETY

A PUBLIC SAFETY AGENCIES

Every **Level I Isolated Village** should have:

1. Coordination between public safety agencies with mutual aid agreements.

B ENVIRONMENTAL RESPONSE

Every **Level I Isolated Village** should have:

1. A community plan for hazardous materials response .
2. Personnel trained in the recognition of, and immediate defensive response to, hazardous materials emergencies.
3. A procedure for notifying appropriate agencies if a hazardous materials release occurs.
4. A procedure for activating local, regional, or state hazardous materials response teams in the event of a hazardous materials release, including teams trained in decontamination, treatment, and transport of seriously contaminated patients.

7 ACCESSIBILITY TO CARE

A FINANCING SERVICES

B EQUAL CARE OPPORTUNITY

Every **Level I Isolated Village** should:

1. Ensure that all patients in need of EMS are provided emergency care and transportation without regard to race, creed, color, sex, national origin, disability, or ability to pay.

C SERVICE AVAILABILITY

Every **Level I Isolated Village** should have:

1. Access, via telephone or radio, to trained and equipped emergency medical responders at all times.

8 COORDINATED RECORD KEEPING

A LOCAL RECORD KEEPING

Every **Level I Isolated Village** should:

1. Maintain training, personnel, and medical records, including the EMS patient

encounter form, as required by applicable state and federal laws.
2. Complete and retain copies of an EMS specific patient encounter form.
3. Ensure that properly completed copies of EMS patient encounter forms accompany the patient to the next level of care.

B REGIONAL AND STATE COORDINATION

Every **Level I Isolated Village** should:

1. Have a system for providing summary data to regional and state EMS agencies.
2. Use a state-approved patient care form for emergency medical services.

9 PUBLIC INFORMATION AND EDUCATION

A ACCESS

Every **Level I Isolated Village** should have:

1. Public education activities to ensure that residents and visitors are familiar with the emergency care and injury prevention resources available to them, and how they may be accessed.
2. First Aid and CPR classes available to the community at least annually.

B EMERGENCY RESPONSE

Every **Level I Isolated Village** should have:

1. Emergency response information available to all school personnel, for the efficient handling of injuries and emergencies, including plans for the transport of critically injured or ill children to an appropriate facility.

C CONSUMER PARTICIPATION

Every **Level I Isolated Village** should:

1. Encourage consumer participation in EMS planning and policy development.
2. Identify consumers with special interest in EMS and encourage their participation in appropriate events.
3. Maintain a library of injury prevention and safety resources in the school and/or local clinic.

10 EVALUATION

A LOCAL REVIEW

Every **Level I Isolated Village** should:

1. Periodically provide patient encounter forms for review by an appropriate EMS Physician Medical Director.
2. Periodically meet and review the community EMS status as compared with the applicable recommendations in *Alaska EMS Goals*.
3. Periodically coordinate with identified allied agencies to confirm or reestablish support and assistance in meeting recommended community goals.
4. For any state-certified ambulance service, have a continuous quality improvement program for EMS patient care.

B REGIONAL REVIEW

Every **Level I Isolated Village** should:

1. Coordinate a community EMS review using the recommendations contained in Alaska EMS Goals every three years.

11 DISASTER RESPONSE

A COORDINATION

Every **Level I Isolated Village** should:

1. Maintain an integrated all-hazard disaster plan.
2. Be included in regional/subarea disaster plans. The plan should identify the most likely disaster threats, address these threats with action plans, define the roles and responsibilities of key public health and safety officials in the event of a disaster, and explain how regional and state disaster response resources are accessed.
3. Have a level D personal protective equipment level capability/response team
4. Have a list of resources and emergency contacts
5. Have a local emergency response plan which includes procedures for notifying authorities of threatened, actual or known bioterrorist events, minimizing exposures, personal safety, including recommendations

on personal protective equipment, and decontamination.
6. Have a list of contacts for information on state plans
7. Have an account on the ADES First Class system.

B TRANSPORTATION

Every **Level I Isolated Village** should have:

1. A plan for ensuring that ill or injured patients can be triaged, treated/stabilized, and evacuated from the community in a disaster.
2. A system for retrieving equipment used in transports.

C PERSONNEL

Every **Level I Isolated Village** should have:

1. A member of the community appointed by the community leaders as the Local Disaster Preparedness Coordinator.
2. Personnel with training in the Incident Command System, familiarity about the initial response to a disaster, and the ability to obtain additional personnel, equipment, supplies, and transportation resources.

D TRAINING

Every **Level I Isolated Village** should have:

1. A Disaster Preparedness Coordinator who completes home study courses, such as those offered by the Federal Emergency Management Agency.
2. Periodic disaster exercises that include those individuals and agencies most likely to be involved in disaster response.

E FACILITIES AND EQUIPMENT

Every **Level I Isolated Village** should:

1. Have sufficient equipment to initiate a rapid and safe response to potential disaster threats.
2. Have a plan for accessing additional equipment and supplies, through mutual aid agreements or direct requests to regional and state disaster agencies.
3. Have an established plan for EMS equipment resupply and return.
4. Evaluate and designate local buildings (schools, churches, community centers) as resources in the disaster plan for sheltering.
5. Identify potential triage, treatment, and transfer sites in disaster facilities.
6. Have pre-stocked disaster supplies available in case of mass casualty disasters, as recommended in **Section 737-Prehospital Disaster Supplies**.

12 MUTUAL AID AGREEMENTS

A ESTABLISHMENT AND MAINTAINANCE

Every **Level I Isolated Village** should:

1. Establish and maintain written mutual aid agreements between local emergency response agencies and with adjacent and neighboring communities.

13 MEDICAL DIRECTION

A EMS MEDICAL DIRECTORS

Every **Level I Isolated Village** should have:

1. When possible, a physician identified for certified or non-certified services, who agrees to fulfill the responsibilities of a physician medical director as outlined in the EMS regulations.
2. The capability for medical direction by phone or radio.
3. For non-certified services, assistance in obtaining medical direction from the regional EMS office.
4. A system to get information back to the provider about the original patient.

B REGIONAL/STATE EMS SYSTEM MEDICAL DIRECTORS

Every **Level I Isolated Village** should:

1. Know how to contact the State/Regional EMS Medical Directors for additional information on medical direction.

14 INJURY PREVENTION

A PROGRAM DEVELOPMENT

Every **Level I Isolated Village** should have:

1. Access to state injury prevention resources.
2. A community-based or regional injury prevention plan that includes:
   - an assessment of community or regional injuries;
   - goals and objectives for improving injury prevention; and
   - strategies for injury prevention programs and activities.

   The **assessment of community or regional injuries** is provided by the state Injury Surveillance and Prevention Program..
   The **goals and objectives** should include education, public policy and environmental changes to promote injury prevention based on major causes of injuries within the community or region.
   Strategies should include activities of proven effectiveness that are culturally and geographically relevant to build public awareness about injuries, programs to increase injury prevention behaviors, and provide injury prevention and survival education for all school age children.

3. Establishment of ordinances and policies that decrease the risk of injuries to community residents and visitors and make appropriate environmental changes to reduce injury events.

B TRAINING

Every **Level I Isolated Village** should:

1. Have local health, social services, education, and public safety personnel who are trained to provide injury prevention information.
2. Know how to access resources from the state, region, and national programs for injury prevention activities.

SECTION 620 LEVEL I HIGHWAY VILLAGES

OVERVIEW

This section contains the specific EMS recommendations for **Level I Highway Villages**. (See **Section 410** for the definition of a Level I Highway Village.) The recommendations are organized in a fourteen-component framework described in **Section 420**.

The section is divided into two subsections. Communities classified as **Level I Highway Villages** are listed in **Section 621**. The recommendations are shown in **Section 622**. Refer to **Section 440-Prehospital/Hospital/ Post-Hospital Index** if you need to know how these recommendations relate to the hospital.

Level I Highway Villages should provide basic life support emergency medical services to all patients when needed within the village as well as patient transport to a higher level of care according to state standards.

621 Community Listings

INTERIOR REGION

Chatanika
Ester
Fox
Moose Creek
Pleasant Valley
Salcha
Two Rivers

SOUTHEAST REGION

Saxman

SOUTHERN REGION

Bristol Bay Subarea

Aleknagik

Kenai Peninsula Borough

Clam Gulch
Cohoe
Cooper Landing
Crown Point
Fox River
Happy Valley
Hope
Kachemak
Kalifonsky
Kasilof
Moose Pass
Nikolaevsk
Ninilchik
Primrose
Salamatof

Kodiak Island Subarea

Women's Bay

Matanuska-Susitna Borough Subarea

Butte
Chickaloon
Houston
Knik
Lazy Mountain
Sutton
Trapper Creek
Willow

Prince William Sound Subarea

Eyak

622 Recommendations

I PERSONNEL

A ADMINISTRATION

Every **Level I Highway Village** should have:

1. A designated person to coordinate EMS activities.
2. Documented periodic meetings of local EMS providers, such as Community Health Aides (CHAs), Community Health Practitioners (CHPs), Village Public Safety Officers (VPSOs), Search and Rescue (SAR) personnel, Emergency Trauma Technicians (ETTs), or Emergency Medical Technicians (EMTs), to review responsibilities and coordinate activities.
3. Quarterly contact with regional or subarea EMS coordinator.
4. Input into a regional/subarea EMS plan.
5. A plan for accessing Critical Incident Stress Management (CISM) for providers as indicated.
6. If applicable, a physician who assumes the responsibilities of a medical director outlined in the EMS regulations.

B PROVIDERS

I Prehospital Emergency Providers

Every **Level I Highway Village** should have:

1. An organized first responder or ambulance service with personnel:
   - At least three EMTs trained to the EMT-I level.
   - Trained in medical communications as appropriate for local resources.
   - With access to medical consultation from a higher level community at all times.
2. At least two people in every high risk site, such as schools and remote occupational areas, trained to the Emergency Trauma Technician level or above.

II Air Medical Services

Every **Level I Highway Village** should have:

1. Availability of, or access to, a state certified medevac service.
2. On every medevac involving advanced life support, an attendant at the EMT-II skill level or above with DHSS-approved air medical escort training.
3. On every medevac with a patient requiring advanced cardiac life support, an attendant at the EMT-III level or above with DHSS-approved air medical escort training.

III Clinic Providers

Every **Level I Highway Village** should have:

1. CHAs and CHPs trained to at least the EMT-I level, pediatric emergencies, oxygen therapy, IV fluid and defibrillation skills.

IV Injury Prevention

Every **Level I Highway Village** should have:

1. Access to injury prevention information, programs, and training opportunities.
2. Knowledge of, and access to, the national poison control number.

V Public Safety

Every **Level I Highway Village** should have:

1. All search and rescue personnel trained to at least the basic first aid level.
2. All law enforcement officers and firefighters trained to at least the basic first aid level.

2 TRAINING

A STANDARDS

Every **Level I Highway Village** should have:

1. Basic and advanced training programs for all levels of prehospital and clinic care providers including pediatric and trauma care.
2. All emergency medical services personnel trained to applicable local, state, and national standards regarding hazardous materials, bloodborne pathogens, incident command system, emergency vehicle operations, and confined space.

3. For all emergency responders in the community, an ongoing training and continuing education program adequate to meet the recertification needs of all providers.
4. Access to distance delivered education through the internet and television.

B PREHOSPITAL TRAINING PERSONNEL

Every **Level I Highway Village** should have:

1. At least one First Aid and CPR Instructor.

3 COMMUNICATIONS

A LOCAL/REGIONAL SYSTEMS

Every **Level I Highway Village** should have:

1. A means for village first responders or ambulance service personnel to contact the designated emergency care receiving facility.
2. A means for two-way communications among first responders or ambulance service personnel.
3. A means for two-way communications between highway first responders and the ambulance service covering their area.
4. A means for two-way communications among search and rescue personnel.
5. A means to dispatch first responders or ambulance service personnel at all times.
6. A current inventory of communications equipment.
7. A plan that incorporates current and local communications equipment with the state and existing regional plans.
8. New equipment procurements coordinated with the regional office.
9. Emergency care providers trained in relay of medical communications, as appropriate to their local resources.
10. Posted communications procedures.

B STATE SYSTEM

C BACK-UP AND RELIABILITY

Every **Level I Highway Village** should have:

1. A weekly test of the EMS communications system and a log which records the communications system's reliability.
2. Predetermined procedures for maintaining EMS communications equipment.
3. A backup system for direct two-way communications between designated emergency care providers and the hospital to which they refer patients.

4 PATIENT TRANSPORT/TRANSFER

A STANDARDS

Every **Level I Highway Village** should have:

1. Copies of the current *Alaska Trauma Triage, Transport and Transfer Guidelines* for all emergency medical services and facilities.

B RESOURCES

I Ground Ambulances

Every **Level I Highway Village** should:

1. Identify, in advance, a vehicle or other means available for patient transportation, and a person responsible for its maintenance. Ideally, it should have room for the patient to lie down, and a means to keep the patient and the emergency care provider sheltered.
2. Have immediate access to ground transport equipment as recommended in **Section 732**, and with pediatric emergency care equipment and medications (see **Section 732.6**).

II Air Medical Services

Every **Level I Highway Village** should have:

1. Access, within a reasonable period of time, to a state-certified air medical service for transport and for interhospital transfer when appropriate.

C PROTOCOLS

Every **Level I Highway Village** should have:

1. A plan for transporting patients based on the degree of injury, available equipment and the level of personnel available to accompany a particular type of transport

(see *Alaska Trauma Triage, Transport and Transfer Guidelines*).
2. Established procedures for emergency air transport of adult and pediatric patients.
3. A system for retrieving equipment transported with the patient.
4. Posted procedures for patient transport.

5 FACILITIES, EQUIPMENT AND SUPPLIES

A FACILITIES

Every **Level I Highway Village** should have:

1. A clinic or designated first aid station equipped to treat and stabilize emergency patients, with emergency care equipment and supplies, as recommended in Section 734.1-Level I.

B EQUIPMENT AND SUPPLIES

Every **Level I Highway Village** should have:

1. Trauma kits readily available for first responders, equipped as recommended in **Section 731.1**.
2. One extrication kit for first responders, equipped as recommended in **Section 731.2**.
3. Equipment and supplies appropriate for training level of EMS providers.
4. Equipment and supplies for emergency care for both pediatric and adult patients as recommended in **Section 734.1**.
5. Predetermined procedures for maintaining equipment.

6 PUBLIC SAFETY

A PUBLIC SAFETY AGENCIES

Every **Level I Highway Village** should have:

1. Coordination between public safety agencies with mutual aid agreements.

B ENVIRONMENTAL RESPONSE

Every **Level I Highway Village** should have:

1. A community plan for hazardous materials response.
2. Personnel trained in the recognition of, and immediate evacuation and protection of people, during a hazardous materials emergency.
3. A procedure for notifying appropriate agencies if a hazardous materials release occurs.
4. A procedure for activating local, regional, or state hazardous materials response teams in the event of a hazardous materials release, including teams trained in decontamination, treatment, and transport of seriously contaminated patients.

7 ACCESSIBILITY TO CARE

A FINANCING SERVICES

B EQUAL CARE OPPORTUNITY

Every **Level I Highway Village** should:

1. Ensure that all patients in need of EMS are provided emergency care and transportation without regard to race, creed, color, sex, national origin, disability, or ability to pay.

C SERVICE AVAILABILITY

Every **Level I Highway Village** should have:

1. Access, via telephone or radio, to trained and equipped emergency medical responders at all times.

8 COORDINATED RECORD KEEPING

A LOCAL RECORD KEEPING

Every **Level I Highway Village** should:

1. Maintain training, personnel, and medical records, including the EMS patient encounter form, as required by applicable state and federal laws.
2. Complete and retain copies of an EMS specific patient encounter form.
3. Ensure that properly completed copies of EMS patient encounter forms accompany the patient to the next level of care.

B REGIONAL AND STATE COORDINATION

Every **Level I Highway Village** should:

1. Have a system for providing summary data to regional and state EMS agencies.
2. Use a state-approved patient care form for emergency medical services.

9 PUBLIC INFORMATION AND EDUCATION

A ACCESS

Every **Level I Highway Village** should have:

1. Public education activities to ensure that residents and visitors are familiar with the emergency care and injury prevention resources available to them, and how they may be accessed.
2. First Aid and CPR classes available to the community at least annually.

B EMERGENCY RESPONSE

Every **Level I Highway Village** should have:

1. Emergency response information available to all school personnel, for the efficient handling of injuries and emergencies, including plans for the transport of critically injured or ill children to an appropriate facility.

C CONSUMER PARTICIPATION

Every **Level I Highway Village** should:

1. Encourage consumer participation in EMS planning and policy development.
2. Identify consumers with special interest in EMS and encourage their participation in appropriate events.
3. Maintain a library of injury prevention and safety resources in a school and/or local clinic ..

10 EVALUATION

A LOCAL REVIEW

Every **Level I Highway Village** should:

1. Periodically provide patient encounter forms for review by an appropriate EMS physician.
2. Periodically meet and review the community EMS status as compared with the applicable recommendations in Alaska EMS Goals.
3. Periodically coordinate with identified allied agencies to confirm or reestablish support and assistance in meeting recommended community goals.
4. For any state-certified ambulance service, have a continuous quality improvement program to evaluate trauma care and all other EMS patient care.

B REGIONAL REVIEW

Every **Level I Highway Village** should:

1. Coordinate a community EMS review using the recommendations contained in *Alaska EMS Goals* every three years.

11 DISASTER RESPONSE

A COORDINATION

Every **Level I Highway Village** should:

1. Maintain an integrated all-hazard disaster plan.
2. Be included in regional/subarea disaster plans. The plan should identify the most likely disaster threats, address these threats with action plans, define the roles and responsibilities of key public health and safety officials in the event of a disaster, and explain how regional and state disaster response resources are accessed.
3. Have a level D personal protective equipment level capability/response team
4. Have a list of resources and emergency contacts
5. Have a local emergency response plan which includes procedures for notifying authorities of threatened, actual or known bioterrorist events, minimizing exposures, personal safety, including recommendations on personal protective equipment, and decontamination.
6. Have a list contacts for information on state plans
7. Have an account on the ADES First Class system.

B TRANSPORTATION

Every **Level I Highway Village** should have:

1. A plan for ensuring that ill or injured patients can be triaged, treated/stabilized, and evacuated from the community in a disaster.
2. A system for retrieving equipment used in transports.

C PERSONNEL

Every **Level I Highway Village** should have:

1. A member of the community appointed by the community leaders as the Local Disaster Preparedness Coordinator.
2. Personnel with training in the Incident Command System, familiarity about the initial response to a disaster, and the ability to obtain additional personnel, equipment, supplies, and transportation resources.

D TRAINING

Every **Level I Highway Village** should have:

3. A Disaster Preparedness Coordinator who completes home study courses, such as those offered by the Federal Emergency Management Agency.
1. Periodic disaster exercises that include those individuals and agencies most likely to be involved in disaster response.

F FACILITIES AND EQUIPMENT

Every **Level I Highway Village** should:

1. Have sufficient equipment to initiate a rapid and safe defensive response to potential disaster threats.
2. Have a plan for accessing additional equipment and supplies, through mutual aid agreements or direct requests to regional and state disaster agencies.
3. Have an established plan for EMS equipment resupply and return.
4. Evaluate and designate local buildings (schools, churches, community centers) as resources in the disaster plan for sheltering.
5. Identify potential triage, treatment, and transfer sites in disaster facilities.
6. Have pre-stocked disaster supplies available in case of mass casualty disasters, as recommended in Section **737.2**.

12 MUTUAL AID AGREEMENTS

A ESTABLISHMENT AND MAINTAINANCE

Every **Level I Highway Village** should:

1. Establish and maintain written mutual aid agreements between local emergency response agencies and with adjacent and neighboring communities.

13 MEDICAL DIRECTION

A EMS MEDICAL DIRECTORS

Every **Level I Highway Village** should have:

1. When possible, a physician identified for certified or non-certified services, who agrees to fulfill the responsibilities of a physician medical director as outlined in the EMS regulations.
2. The capability for medical direction by phone or radio.
3. For non-certified services, assistance in obtaining medical direction from the regional EMS office.
4. A system to get information back to the provider about the original patient.

B REGIONAL/STATE EMS SYSTEM MEDICAL DIRECTORS

Every **Level I Highway Village** should:

1. Know how to contact the State/Regional EMS Medical Directors for additional information on medical direction.

14 INJURY PREVENTION

A PROGRAM DEVELOPMENT

Every **Level I Highway Village** should have:

1. Access to state injury prevention resources.
2. A community-based or regional injury prevention plan that includes:
   - an assessment of community or regional injuries;

- goals and objectives for improving injury prevention; and
- strategies for injury prevention programs and activities.

The **assessment of community or regional injuries** is provided by the state Injury Surveillance and Prevention Program..
The **goals and objectives** should include education, public policy and environmental changes to promote injury prevention based on major causes of injuries within the community or region.
Strategies should include activities of proven effectiveness that are culturally and geographically relevant to build public awareness about injuries, programs to increase injury prevention behaviors, and provide injury prevention and survival education for all school age children.

3. Establishment of ordinances and policies that decrease the risk of injuries to community residents and visitors and make appropriate environmental changes to reduce injury events.

B TRAINING

Every **Level I Highway Village** should:

1. Have local health, social services, education, and public safety personnel who are trained to provide injury prevention information.
2. Know how to access resources from the state, region, and national programs for injury prevention activities.

SECTION 630 LEVEL II ISOLATED TOWNS OR SUB-REGIONAL COMMUNITIES

OVERVIEW

This section contains the specific EMS recommendations for **Level II Isolated Communities**. (See **Section 410** for the definition of a Level II Isolated Sub-Regional Community or Town.) The recommendations are organized in a fourteen-component framework described in **Section 420**.

The section is divided into two subsections. Communities classified as **Level II Isolated Communities** are listed in **Section 631**. The recommendations are shown in **Section 632**. Refer to **Section 440 – Prehospital/Hospital/Post-Hospital Index** if you need to know how these recommendations relate to hospital care.

Level II Isolated Communities have mid-level practitioner (PA or NP) or physician services.

631 Community Listings

INTERIOR REGION

Big Delta
Delta Junction
Fort Yukon
Galena
Healy
McGrath
Tanana
Tok

NORTON SOUND REGION

Unalakleet

SOUTHEAST REGION

Craig
Gustavus
Haines
Hoonah
Klawock
Pelican
Skagway
Thorne Bay
Yakutat

Annette Island Subarea

Metlakatla

SOUTHERN REGION

Aleutian/Pribilof Islands Subarea

Adak (military)
Akutan
Amchitka (military)
King Cove
Saint George
Saint Paul
Sand Point
Shemya Station (military)
Unalaska

Bristol Bay Subarea

Chignik
Naknek
Togiak

Copper River Subarea

Glennallen

Kenai Peninsula Borough Subarea

Seldovia

Prince William Sound Subarea

Whittier

YUKON-KUSKOKWIM REGION

Aniak

632 Recommendations

I PERSONNEL

A ADMINISTRATION

Every **Level II Isolated** should have:

1. A designated person to coordinate EMS activities who is familiar with procedures for requesting EMS technical assistance.
2. Documented quarterly meetings for those involved in EMS to review responsibilities and administrative issues and coordinate activities.
3. Quarterly contact with regional or subarea EMS coordinator.
4. Input into a regional/subarea EMS plan.
5. A plan for accessing Critical Incident Stress Management (CISM) for providers as indicated.
6. A physician who assumes the responsibilities of a medical director outlined in the EMS regulations.
7. Knowledge of how to request EMS Technical Assistance.

B PROVIDERS

I Prehospital Emergency Personnel

Every **Level II Isolated Community** should have:

1. At least two EMT-IIs and five EMT-Is,
   - Available to provide emergency medical care at all times;
   - Trained in the use of communications as appropriate for local resources; and
   - With access to physician medical consultation at all times.
2. At least two people in every high risk site, such as schools and remote occupational areas trained to the Emergency Trauma Technician level or above.
3. Those communities with extensive roadways should have an organized first responder service with personnel trained to at least the Emergency Trauma Technician level, but preferably the EMT-I level.

4. At least two EMS providers trained in defibrillation.
5. Key active EMTs in the emergency medical service trained in extrication.

II Air Medical Services

Every **Level II Isolated Community** should have:

1. Availability of, or access to, a state certified medevac service.
2. On every medevac utilizing local personnel, an attendant with a minimum of EMT-I skill level, with DHSS-approved air medical escort training.
3. On every medevac involving advanced life support, an attendant at the EMT-II skill level or above with DHSS-approved air medical escort training.
4. On every medevac with a patient requiring advanced cardiac life support, an attendant at the EMT-III level or above with DHSS-approved air medical escort training.

III Clinic Providers

Every **Level II Isolated Community** should have:

1. CHAs and CHPs trained to at least the EMT-I level with additional training in DHSS-approved air medical care, pediatric emergencies, oxygen therapy, and IV fluid skills.
2. Mid-level practitioners or physicians trained in Advanced Trauma Life Support (ATLS), Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), and DHSS-approved air medical care.

IV Injury Prevention

Every **Level II Isolated Community** should have:

1. A designated community or regional injury prevention specialist.
2. Knowledge of, and access to, the national poison control number.

V Public Safety

Every **Level II Isolated Community** should have:

1. All search and rescue personnel trained to at least the Emergency Trauma Technician level.
2. All law enforcement officers and firefighters trained to at least the Emergency Trauma Technician level.

2 TRAINING

A STANDARDS

Every **Level II Isolated Community** should have:

1. Basic and advanced training programs for all levels of prehospital and clinic care providers including pediatric and trauma care, use of automated external defibrillators, and DHSS-approved air medevac training.
2. All emergency medical services personnel trained to applicable local, state, and national standards regarding hazardous materials, bloodborne pathogens, incident command system, emergency vehicle operations, and confined space.
3. For all emergency responders in the community, an ongoing training and continuing education program adequate to meet the recertification needs of all providers.
4. Access to state approved emergency medical dispatcher training programs.
5. Access to distance delivered education through the internet and television.

B PREHOSPITAL TRAINING PERSONNEL

Every **Level II Isolated Community** should have:

1. At least one First Aid and CPR Instructor.
2. At least one state certified EMT Instructor.

3 COMMUNICATIONS

A LOCAL/REGIONAL SYSTEMS

Every **Level II Isolated Community** should have:

1. A system for direct two-way communications between emergency care providers and the designated emergency

care receiving facility to which they refer patients, and with their medical director.
2. A means for two-way communications between all emergency responders.
3. A means for two-way communications among search and rescue personnel.
4. A means to dispatch first responders or ambulance service personnel at all times.
5. A current inventory of communications equipment.
6. A plan that incorporates current and local communications equipment with the regional plan.
7. New equipment procurements coordinated with the regional EMS agency.
8. Emergency care providers trained in relay of medical communications, as appropriate to their local resources.
9. One telephone number, preferably 911 Enhanced, to access fire, law enforcement and emergency medical services.

B STATE SYSTEM

Every **Level II Isolated Community** should:

1. Ensure that proposed communications resources are compatible with existing and anticipated local, regional, and state communications plans and systems.

C BACK-UP AND RELIABILITY

Every **Level II Isolated Community** should have:

1. A weekly test of the EMS communications system and a log which records the communications system's reliability.
2. Predetermined procedures for maintaining EMS communications equipment.
3. A backup system for direct two-way communications between designated emergency care providers and the hospital to which they refer patients, and with their physician supervisors.

4 PATIENT TRANSPORT/TRANSFER

A STANDARDS

Every **Level II Isolated Community** should have:

1. Access to a state-certified air medical service.
2. Organized agencies providing emergency patient care certified as a ground ambulance at the appropriate level.
3. Copies of the current *Alaska Trauma Triage, Transport and Transfer Guidelines* for all emergency medical services and facilities.
4. Local triage and transfer protocols.
5. An organized quality improvement program for all air medical and ground ambulance services.

B RESOURCES

I Ground Ambulances

Every **Level II Isolated Community** should have:

1. A state-certified emergency medical service (ambulance service wherever appropriate) on call at all times with:
   - A locally determined response time standard which defines the time from notification to arrival at the scene for normal emergency responses. It is recommended that an emergency responder arrive on scene within ten minutes where geographically feasible. Rural communities should establish a standard with consideration for outlying variables such as local road and weather conditions, and staffing patterns.
   - At least one EMT-II on transports of over 30 minutes.
   - Written mutual aid agreements with adjacent services (see **Component 12**).
   - Response time for first responders to the scene within 15 minutes of notification, for at least 75 percent of calls.
   - Rural communities should establish a standard with consideration for outlying variables.
   - Written mutual aid agreements between the emergency medical ambulance service and highway first responders who are not part of the service.

II Air Medical Services

Every **Level II Isolated Community** should have:

1. A maintained landing strip/area or float ramp for fixed-wing/helicopter aircraft with means to provide lighting for emergencies.
2. A designated person/agency responsible for ensuring landing area safety, and storing emergency lighting devices.
3. Immediate access to air transport equipment as recommended in **Section 733** including pediatric emergency care equipment and medications (see **Section 733.4**).
4. Access within a reasonable period of time, to a state-certified air medical service for transport and for interhospital transfer when appropriate. Alternative transport should be planned for when these resources are unavailable or weather hinders their use.

C PROTOCOLS

Every **Level II Isolated Community** should have:

1. A plan for transporting patients based on the degree of injury, available equipment and the level of personnel available to accompany a particular type of transport (see *Alaska Trauma Triage, Transport and Transfer Guidelines*).
2. Established procedures for emergency air transport of adult and pediatric patients as delineated in the *Alaska Medevac Manual*.
3. A system for retrieving equipment transported with the patient.
4. Posted procedures for patient transport.
5. For all transport utilizing local personnel standing orders for patient transport.

5 FACILITIES, EQUIPMENT AND SUPPLIES

A FACILITIES

Every **Level II Isolated Community** should have:

1. A clinic equipped to treat or provide initial stabilization for emergency patients (see **Section 734.2**).
2. Basic diagnostic X-ray and lab capabilities.

B EQUIPMENT AND SUPPLIES

Every **Level II Isolated Community** should have:

1. Trauma kits readily available for first responders, equipped as recommended in **Section 731.2**.
2. One extrication kit for first responders, equipped as recommended in **Section 731.2**.
3. Equipment and supplies appropriate for training level of EMS providers.
4. Equipment and supplies for emergency care for both pediatric and adult patients as recommended in **Section 734.2**.
5. Predetermined procedures for maintaining equipment.

6 PUBLIC SAFETY

A PUBLIC SAFETY AGENCIES

Every **Level II Isolated Community** should have:

1. Coordination between public safety agencies with mutual aid agreements.

B ENVIRONMENTAL RESPONSE

Every **Level II Isolated Community** should have:

1. A community plan for hazardous materials response which covers the topics in *Managing Hazardous Materials Incidents, Volume I* (available from the State EMS Office).
2. Personnel trained in the recognition of, and immediate evacuation and protection of people, during a hazardous materials emergency.
3. A procedure for notifying appropriate agencies if a hazardous materials release occurs.
4. A procedure for activating local, regional, or state hazardous materials response teams in the event of a hazardous materials release, including teams trained in decontamination, treatment, and transport of seriously contaminated patients.

7 ACCESSIBILITY TO CARE

A FINANCING SERVICES

Every **Level II Isolated Community** should have:

1. A plan for monitoring emergency care costs and for coordinating patient care billings with appropriate local or regional agencies.

B EQUAL CARE OPPORTUNITY

Every **Level II Isolated Community** should:

1. Ensure that all patients in need of EMS are provided emergency care and transportation without regard to race, creed, color, sex, national origin, disability, or ability to pay.

C SERVICE AVAILABILITY

Every **Level II Isolated Community** should have:

1. Access, via telephone or radio, to trained and equipped emergency medical responders at all times.

8 COORDINATED RECORD KEEPING

A LOCAL RECORD KEEPING

Every **Level II Isolated Community** should:

1. Maintain training, personnel, and medical records, including the EMS patient encounter form, as required by applicable state and federal laws.
2. Have ambulance run report forms which meet minimum state data requirements kept for all emergency response (see **Section 742**).
3. Have clinic emergency logs maintained by appropriate clinic personnel.
4. Complete and retain copies of an EMS specific patient encounter form.
5. Ensure that properly completed copies of EMS patient encounter forms accompany the patient to the next level of care.

B REGIONAL AND STATE COORDINATION

Every **Level II Isolated Community** should:

1. Have a system for providing summary data to regional and state EMS agencies.
2. Use a state-approved patient care form for emergency medical services.

9 PUBLIC INFORMATION AND EDUCATION

A ACCESS

Every **Level II Isolated Community** should have a system to ensure that:

1. All residents, visitors and schools should know how to access the local EMS system preferably through a 911 system.
2. Public education activities to ensure that residents and visitors are familiar with the emergency care and injury prevention resources available to them.

B EMERGENCY RESPONSE

Every **Level II Isolated Community** should have:

1. At least one certified CPR instructor per 500 people.
2. At least one First Aid instructor per 500 people.
3. First Aid and CPR classes for all school students.
4. First Aid and CPR classes for community residents annually.
5. Access to training aids necessary for CPR and First Aid training.
6. At least 25 percent of all residents trained in CPR.
7. Posted procedures for accessing the local EMS system available to all school personnel for the efficient handling of injuries and other emergencies, including plans for the transport of critically injured or ill children to an appropriate facility.
8. Information available to public safety and local government personnel as to who to contact in case of a disaster.
9. Information available to school administrators regarding teaching ETT courses in high schools.

C CONSUMER PARTICIPATION

Every **Level II Isolated Community** should:

1. Encourage consumer participation in EMS planning and policy development.
2. Identify consumers with special interest in EMS and encourage their participation in appropriate events.
3. Maintain a library of injury prevention and safety resources in a school and/or local clinic ..
4. Have a local EMS or health council with consumer representation.
5. Encourage participation by business and government leaders.

10 EVALUATION

A LOCAL REVIEW

Every **Level II Isolated Community** should:

1. Periodically provide patient encounter forms for review by an appropriate EMS physician.
2. Periodically meet and review the community EMS status as compared with the applicable recommendations in *Alaska EMS Goals*.
3. Periodically coordinate with identified allied agencies to confirm or reestablish support and assistance in meeting recommended community goals.
4. Have a physician or mid-level provider review all emergency response runs to determine whether the care and transfer provided were appropriate and in accordance with local, regional, and state guidelines, questionable runs should be directed to the medical director (s).
5. For any state-certified ambulance service, have a continuous quality improvement program to evaluate trauma care and all other EMS patient care.

B REGIONAL REVIEW

Every **Level II Isolated Community** should:

1. Coordinate a community EMS review using the recommendations contained in *Alaska EMS Goals* every three years.

11 DISASTER RESPONSE

A COORDINATION

Every **Level II Isolated Community** should:

1. Maintain an integrated all-hazard plan.
2. Be included in regional/subarea disaster plans. The plan should identify the most likely disaster threats, address these threats with action plans, define the roles and responsibilities of key public health and safety officials in the even of a disaster, and explain how regional and state disaster response resources are accessed.
3. Have a level C personal protective equipment level capability/response team
4. Have a list of resources and emergency contacts
5. Know of state plans for responding to bioterrorism
6. Have a local emergency response plan which includes procedures for notifying authorities of threatened, actual or known bioterrorist events, minimizing exposures, personal safety, including recommendations on personal protective equipment, and decontamination.
7. Have contacts for information on state plans
8. Have an account on the ADES First Class system which is checked at least once a week and more frequently in times of emergency.
9. Have personnel trained in the use of the START triage method.

B TRANSPORTATION

Every **Level II Isolated Community** should have:

1. A plan for ensuring that ill or injured patients can be triaged, treated/stabilized, and evacuated from the community in a disaster.
2. A system for retrieving equipment used in transports.

C PERSONNEL

Every **Level II Isolated Community** should have:

1. A member of the community appointed by the community leaders as the Local Disaster Preparedness Coordinator.
2. Personnel with training in the Incident Command System, familiarity about the initial response to a disaster, and the ability to obtain additional personnel, equipment, supplies, and transportation resources.

3. Adequate community personnel trained and certified as Red Cross Shelter Managers.

D TRAINING

Every **Level II Isolated Community** should have:

1. A Disaster Preparedness Coordinator who completes home study courses, such as those offered by the Federal Emergency Management Agency.
2. Periodic disaster exercises that include those individuals and agencies most likely to be involved in disaster response.

F FACILITIES AND EQUIPMENT

Every Level II Isolated Community should:

1. Have sufficient equipment to initiate a rapid and safe disaster response.
2. Have a plan for accessing additional equipment and supplies, through mutual aid agreements or direct requests to regional and state disaster agencies.
3. Have an established plan for EMS equipment resupply and return.
4. Evaluate and designate local buildings (schools, churches, community centers) as resources in the disaster plan for sheltering.
5. Identify potential triage, treatment, and transfer sites in disaster facilities.
6. Have pre-stocked disaster supplies available in case of mass casualty disasters, as recommended in **Section 737.2**.

12 MUTUAL AID AGREEMENTS

A ESTABLISHMENT AND MAINTAINANCE

Every **Level II Isolated Community** should:

1. Establish and maintain written mutual aid agreements between local emergency response agencies, e.g. EMS, fire, police, health clinic, etc.
2. Establish and maintain written mutual aid agreements with adjacent and neighboring communities.

13 MEDICAL DIRECTION

A EMS MEDICAL DIRECTORS

Every **Level II Isolated Community** should have:

1. A physician identified for certified or non-certified services, who agrees to fulfill the responsibilities of a physician medical director as outlined in the EMS regulations.
2. The capability for medical direction by phone or radio.
3. A system to get information back to the provider about the original patient.
4. A QA/QI system overseen by the physician medical director.

B REGIONAL/STATE EMS SYSTEM MEDICAL DIRECTORS

Every **Level II Isolated Community** should:

1. Know how to contact the State/Regional EMS Medical Directors for additional information on medical direction.

14 INJURY PREVENTION

A PROGRAM DEVELOPMENT

Every **Level II Isolated Community** should have:

Every **Level I Highway Village** should have:

1. A copy of the State Injury Prevention Plan and access to state injury prevention resources.
2. A community-based or regional injury prevention plan that includes:
   - an assessment of community or regional injuries;
   - goals and objectives for improving injury prevention; and
   - strategies for injury prevention programs and activities.

   The **assessment of community or regional injuries** is provided by the state Injury Surveillance and Prevention Program..
   The **goals and objectives** should include education, public policy and environmental changes to promote injury prevention based on major causes of injuries within the community or region.

Strategies should include activities of proven effectiveness that are culturally and geographically relevant to build public awareness about injuries, programs to increase injury prevention behaviors, and provide injury prevention and survival education for all school age children.

3. Establishment of ordinances and policies that decrease the risk of injuries to community residents and visitors and make appropriate environmental changes to reduce injury events.

B TRAINING

Every **Level II Isolated Community** should:

1. Have local health, social services, education, and public safety personnel who are trained to provide injury prevention information.
2. Know how to access resources from the state, region, and national programs for injury prevention activities.

SECTION 640 LEVEL II HIGHWAY TOWNS OR SUB-REGIONAL COMMUNITIES

OVERVIEW

This section contains the specific EMS recommendations for **Level II Highway Sub-Regional Communities or Towns**.) The recommendations are organized in a fourteen-component framework described in **Section 420**.

The section is divided into two subsections. Communities classified as **Level II Highway Communities or Towns** are listed in **Section 641**. The recommendations are shown in **Section 642**. Refer to **Section 440-Prehospital/Hospital/Post-Hospital Index** if you need to know how these recommendations relate to hospital care.

Level II Highway Communities have mid-level practitioner (PA or NP) or physician services.

641 Community Listings

INTERIOR REGION

Clear (military)
Eielson Air Force Base (military)
Fort Greely (military)
Nenana
North Pole

SOUTHERN REGION

Anchorage and Cook Inlet

Chugiak
Eagle River
Fort Richardson (military)
Girdwood
Peters Creek

Kodiak Island Subarea

Kodiak Station (military)

Kenai Peninsula Borough

Anchor Point
Kenai
Nikiski
Ridgeway
Sterling

Matanuska-Susitna Borough Subarea

Big Lake
Meadow Lakes
Talkeetna
Wasilla

642 Recommendations

I PERSONNEL

A ADMINISTRATION

Every **Level II Highway Community** should have:

1. A designated person to coordinate EMS activities.
2. Documented quarterly meetings for those involved in EMS to review responsibilities and administrative issues and coordinate activities.
3. Quarterly contact with regional or subarea EMS coordinator.
4. Input into a regional/subarea EMS plan.
5. A plan for accessing Critical Incident Stress Management (CISM) for providers as indicated.
6. A physician who assumes the responsibilities of a medical director outlined in the EMS regulations if applicable.
7. Knowledge of how to request EMS Technical Assistance.

B PROVIDERS

I Prehospital Emergency Personnel

Every **Level II Highway Community** should have:

1. At least two EMT-IIs and five EMT-Is,
   - Available to provide emergency medical care at all times;
   - Trained in the use of communications as appropriate for local resources; and
   - With access to physician medical consultation at all times.
2. At least two people in every high risk site, such as schools and remote occupational areas trained to the Emergency Trauma Technician level or above.
3. All active EMTs in the emergency medical service trained in extrication.
4. At least two EMS providers trained in defibrillation.

II Clinic Providers

Every **Level II Highway Community** should have:

1. CHAs and CHPs, if available, trained to at least the EMT-I level with additional training in DHSS-approved air medical care, pediatric emergencies, oxygen therapy, and IV fluid skills.
2. Mid-level practitioners or physicians trained in Advanced Trauma Life Support (ATLS), Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), and DHSS-approved air medical care.

III Injury Prevention

Every **Level II Highway Community** should have:

1. A designated community or regional injury prevention specialist.
2. Knowledge of, and access to, the national poison control number.

IV Public Safety

Every **Level II Highway Community** should have:

1. All search and rescue personnel trained to at least the Emergency Trauma Technician level.
2. All law enforcement officers and firefighters trained to at least the Emergency Trauma Technician level.

2 TRAINING

A STANDARDS

Every **Level II Highway Community** should have:

1. Basic and advanced training programs for all levels of prehospital and clinic care providers including pediatric and trauma care, use of automated external defibrillators, and DHSS-approved air medevac training.
2. All emergency medical services personnel trained to applicable local, state, and national standards regarding hazardous materials, bloodborne pathogens, incident

command system, emergency vehicle operations, and confined space.
3. For all emergency responders in the community, an ongoing training and continuing education program adequate to meet the recertification needs of all providers.
4. Access to state approved emergency medical dispatcher training programs.
5. Access to distance delivered education through the internet and television.

B PREHOSPITAL TRAINING PERSONNEL

Every **Level II Highway Community** should have:

1. At least one First Aid and CPR Instructor.
2. At least one state certified EMT Instructor.

3 COMMUNICATIONS

A LOCAL/REGIONAL SYSTEMS

Every Community should have:

1. A system for direct two-way communications between emergency care providers and the designated emergency care receiving facility to which they refer patients, and with their medical director.
2. A means for two-way communications between all emergency responders.
3. A means for two-way communications among search and rescue personnel.
4. A means to dispatch first responders or ambulance service personnel at all times.
5. A current inventory of communications equipment.
6. A plan that incorporates current and local communications with state and existing regional plans.
7. New equipment procurements coordinated with the regional EMS agency.
8. Emergency care providers trained in relay of medical communications, as appropriate to their local resources.
9. One telephone number, preferably 911 Enhanced, to access fire, law enforcement and emergency medical services.

B STATE SYSTEM

Every **Level II Highway Community** should:

1. Ensure that proposed communications resources are compatible with existing and anticipated local, regional, and state communications plans and systems.

C BACK-UP AND RELIABILITY

Every **Level II Highway Community** should have:

1. A weekly test of the EMS communications system and a log which records the communications system's reliability.
2. Predetermined procedures for maintaining EMS communications equipment.
3. A backup system for direct two-way communications between designated emergency care providers and the hospital to which they refer patients, and with their physician supervisors.

4 PATIENT TRANSPORT/TRANSFER

A STANDARDS

Every **Level II Highway Community** should have:

1. Access to a state-certified air medical service.
2. Organized agencies providing emergency patient care certified as a ground ambulance at the appropriate level.
3. Copies of the current *Alaska Trauma Triage, Transport and Transfer Guidelines* for all emergency medical services and facilities.
4. Local triage and transfer protocols.
5. An organized quality improvement program for all air medical and ground ambulance services.

B RESOURCES

I Ground Ambulances

Every **Level II Highway Community** should have:

1. A state-certified emergency medical service (ambulance service wherever appropriate) on call at all times with:

- A locally determined response time standard which defines the time from notification to arrival at the scene for normal emergency

responses. It is recommended that an emergency responder arrive on scene within ten minutes where geographically feasible. Rural communities should establish a standard with consideration for outlying variables such as local road and weather conditions, and staffing patterns.
   - At least one EMT-II on transports of over 30 minutes.
   - Written mutual aid agreements with adjacent services (see **Component 12**).
2. A highway first responder system with:
   - Response time for first responders to the scene within 15 minutes of notification, for at least 75 percent of calls.
   - Rural communities should establish a standard with consideration for outlying variables.
   - Written mutual aid agreements between the emergency medical ambulance service and highway first responders who are not part of the service.

II Air Medical Services

Every **Level II Highway Community** should have:

1. Access, within a reasonable period of time, to a state-certified air medical service for transport and for interhospital transfer when appropriate.

C PROTOCOLS

Every **Level II Highway Community** should have:

1. A plan for transporting patients based on the degree of injury, available equipment and the level of personnel available to accompany a particular type of transport (see *Alaska Trauma Triage, Transport and Transfer Guidelines*).
2. Established procedures for emergency air transport of adult and pediatric patients as delineated in the *Alaska Medevac Manual*.
3. A system for retrieving equipment transported with the patient.
4. Posted procedures for patient transport.
5. For all transport utilizing local personnel standing orders for patient transport.

5 FACILITIES, EQUIPMENT AND SUPPLIES

A FACILITIES

Every **Level II Highway Community** should have:

1. A clinic equipped to treat or provide initial stabilization for emergency patients (see **Section 734.2**). This may be the health center or another designated emergency care center.
2. Basic diagnostic X-ray and lab capabilities.

B EQUIPMENT AND SUPPLIES

Every **Level II Highway Community** should have:

1. Trauma kits readily available for first responders, equipped as recommended in **Section 731.2**.
2. One extrication kit for first responders, equipped as recommended in **Section 731.2**.
3. Equipment and supplies appropriate for training level of EMS providers.
4. Equipment and supplies for emergency care for both pediatric and adult patients as recommended in **Section 734.2**.
5. Predetermined procedures for maintaining equipment.

6 PUBLIC SAFETY

A PUBLIC SAFETY AGENCIES

Every **Level II Highway Community** should have:

1. Coordination between public safety agencies with mutual aid agreements.

B ENVIRONMENTAL RESPONSE

Every **Level II Highway Community** should have:

1. A community plan for hazardous materials response.
2. Personnel trained in the recognition of, and immediate evacuation and protection of people, during a hazardous materials emergency.

3. A procedure for notifying appropriate agencies if a hazardous materials release occurs.
4. A procedure for activating local, regional, or state hazardous materials response teams in the event of a hazardous materials release, including teams trained in decontamination, treatment, and transport of seriously contaminated patients.

7 ACCESSIBILITY TO CARE

A FINANCING SERVICES

Every **Level II Highway Community** should have:

1. A plan for monitoring emergency care costs and for coordinating patient care billings with appropriate local or regional agencies.
2.

B EQUAL CARE OPPORTUNITY

Every **Level II Highway Community** should:

1. Ensure that all patients in need of EMS are provided emergency care and transportation without regard to race, creed, color, sex, national origin, disability, or ability to pay.

C SERVICE AVAILABILITY

Every **Level II Highway Community** should have:

1. Access, via telephone or radio, to trained and equipped emergency medical responders at all times.

8 COORDINATED RECORD KEEPING

A LOCAL RECORD KEEPING

Every **Level II Highway Community** should:

1. Maintain training, personnel, and medical records, including the EMS patient encounter form, as required by applicable state and federal laws.
2. Have ambulance run report forms which meet minimum state data requirements kept for all emergency response (see **Section 742**).
3. Have clinic emergency logs maintained by appropriate clinic personnel.
4. Complete and retain copies of an EMS specific patient encounter form.
5. Ensure that properly completed copies of EMS patient encounter forms accompany the patient to the next level of care.

B REGIONAL AND STATE COORDINATION

Every **Level II Highway Community** should:

1. Use a state-approved patient care form for emergency medical services.

9 PUBLIC INFORMATION AND EDUCATION

A ACCESS

Every **Level II Highway Community** should have:

1. All residents, visitors and schools should know how to access the local EMS system preferably through a 911 system.
2. Public education activities to ensure that residents and visitors are familiar with the emergency care and injury prevention resources available to them.

B EMERGENCY RESPONSE

Every **Level II Highway Community** should have:

1. At least one certified CPR instructor per 500 people.
2. At least one First Aid instructor per 500 people.
3. First Aid and CPR classes for all school students.
4. First Aid and CPR classes for community residents annually.
5. Access to training aids necessary for CPR and First Aid training.
6. At least 25 percent of all residents trained in CPR.
7. Posted procedures for accessing the local EMS system available to all school personnel for the efficient handling of injuries and other emergencies, including plans for the transport of critically injured or ill children to an appropriate facility.

8. Information available to public safety and local government personnel as to who to contact in case of a disaster.
9. Information available to school administrators regarding teaching ETT courses in high schools.

C CONSUMER PARTICIPATION

Every **Level II Highway Community** should:

1. Encourage consumer participation in EMS planning and policy development.
2. Identify consumers with special interest in EMS and encourage their participation in appropriate events.
3. Maintain a library of injury prevention and safety resources in a school and/or local clinic ..
4. Have a local EMS or health council with consumer representation.
5. Encourage participation by business and government leaders.

10 EVALUATION

A LOCAL REVIEW

Every **Level II Highway Community** should:

1. Periodically provide patient encounter forms for review by an appropriate EMS physician.
2. Annually meet and review the community EMS status as compared with the applicable recommendations in *Alaska EMS Goals*.
3. Periodically coordinate with identified allied agencies to confirm or reestablish support and assistance in meeting recommended community goals.
4. Have a physician or mid-level provider review all emergency response runs to determine whether the care and transfer provided were appropriate and in accordance with local, regional, and state guidelines, questionable runs should be directed to the medical director (s).
5. For any state-certified ambulance service, have a continuous quality improvement program to evaluate trauma care and all other EMS patient care.

B REGIONAL REVIEW

Every **Level II Highway Community** should:

1. Coordinate a community EMS review using the recommendations contained in *Alaska EMS Goals* every three years.

11 DISASTER RESPONSE

A COORDINATION

Every **Level II Highway Community** should:

1. Maintain an integrated all-hazard plan.
2. Be included in regional/subarea disaster plans. The plan should identify the most likely disaster threats, address these threats with action plans, define the roles and responsibilities of key public health and safety officials in the even of a disaster, and explain how regional and state disaster response resources are accessed.
3. Have a level C personal protective equipment level capability/response team
4. Have a list of resources and emergency contacts
5. Know state plans for responding to bioterrorism
6. Have a local emergency response plan which includes procedures for notifying authorities of threatened, actual or known bioterrorist events, minimizing exposures, personal safety, including recommendations on personal protective equipment, and decontamination.
7. Know the diseases reportable to the state and the mechanisms for reporting.
8. Have contacts for information on state plans
9. Have an account on the ADES First Class system which is checked at least once a week and more frequently in times of emergency.
10. Have personnel trained in the use of the START triage method.

B TRANSPORTATION

Every **Level II Highway Community** should have:

1. A plan for ensuring that ill or injured patients can be triaged, treated/stabilized, and evacuated from the community in a disaster.
2. A system for retrieving equipment used in transports.

C PERSONNEL

Every **Level II Highway Community** should have:

1. A member of the community appointed by the community leaders as the Local Disaster Preparedness Coordinator.
2. Personnel with training in the Incident Command System, familiarity about the initial response to a disaster, and the ability to obtain additional personnel, equipment, supplies, and transportation resources.
3. Adequate community personnel trained and certified as Red Cross Shelter Managers.

D TRAINING

Every **Level II Highway Sub-Regional Community** should have:

1. The Disaster Preparedness Coordinator complete the following FEMA Home Study Courses: *HS-1 Emergency Program Manager, HS-2 Emergency Management, USA; HS-5 Hazardous Materials: A Citizen's Orientation*.
2. Periodic disaster exercises that include those individuals and agencies most likely to be involved in disaster response.
3. Community Shelter Managers complete a Shelter Systems Officer Course approved by the American Red Cross.

F FACILITIES AND EQUIPMENT

Every **Level II Highway Community** should:

1. Have sufficient equipment to initiate a rapid and safe disaster response.
2. Have a plan for accessing additional equipment and supplies, through mutual aid agreements or direct requests to regional and state disaster agencies.
3. Have an established plan for EMS equipment resupply and return.
4. Evaluate and designate local buildings (schools, churches, community centers) as resources in the disaster plan for sheltering.
5. Identify potential triage, treatment, and transfer sites in disaster facilities.
6. Have pre-stocked disaster supplies available in case of mass casualty disasters, as recommended in **Section 737.2**.

12 MUTUAL AID AGREEMENTS

A ESTABLISHMENT AND MAINTAINANCE

Every **Level II Highway Community** should:

1. Establish and maintain written mutual aid agreements between local emergency response agencies, e.g. EMS, fire, police, health clinic, etc.
2. Establish and maintain written mutual aid agreements with adjacent and neighboring communities.

13 MEDICAL DIRECTION

A EMS MEDICAL DIRECTORS

Every **Level II Highway Community** should have:

1. A physician identified for certified or non-certified services, who agrees to fulfill the responsibilities of a physician medical director as outlined in the EMS regulations.
2. The capability for medical direction by phone or radio.
3. For non-certified services, assistance in obtaining medical direction from the regional EMS office.
4. A system to get information back to the provider about the original patient.
5. A QA/QI system that the physician medical director oversees.

B REGIONAL/STATE EMS SYSTEM MEDICAL DIRECTORS

Every **Level II Highway Community** should:

1. Know how to contact the State/Regional EMS Medical Directors for additional information on medical direction.

14 INJURY PREVENTION

A PROGRAM DEVELOPMENT

Every **Level II Highway Community** should have:

1. A copy of the State Injury Prevention Plan and access to state injury prevention resources.
2. A community-based or regional injury prevention plan that includes:
   - an assessment of community or regional injuries;
   - goals and objectives for improving injury prevention; and
   - strategies for injury prevention programs and activities.

   The **assessment of community or regional injuries** is provided by the state Injury Surveillance and Prevention Program..
   The **goals and objectives** should include education, public policy and environmental changes to promote injury prevention based on major causes of injuries within the community or region.
   Strategies should include activities of proven effectiveness that are culturally and geographically relevant to build public awareness about injuries, programs to increase injury prevention behaviors, and provide injury prevention and survival education for all school age children.

3. Establishment of ordinances and policies that decrease the risk of injuries to community residents and visitors and make appropriate environmental changes to reduce injury events.

B TRAINING

Every **Level II Highway Community** should:

1. Have local health, social services, education, and public safety personnel who are trained to provide injury prevention information.
2. Know how to access resources from the state, region, and national programs for injury prevention activities.

SECTION 650 LEVEL III LARGE TOWNS OR REGIONAL CENTERS

OVERVIEW

This section contains the specific EMS recommendations for **Level III Large Towns or Regional Centers**. (See **Section 410** for the definition of a Level III Large Town or Regional Center.) The recommendations are organized in a fourteen-component framework described in **Section 420**.

The section is divided into two subsections. Communities classified as **Level III Large Towns or Regional Centers** are listed in **Section 651**. The recommendations are shown in **Section 652**. Refer to **Section 440 – Prehospital/Hospital/Post-Hospital Index** if you need to know how these recommendations relate to the hospital.

A **Level III Large Town or Regional Center** has a community hospital with physicians.

651 Community Listings

INTERIOR REGION

Fort Wainwright (military)

NORTH SLOPE BOROUGH REGION

Barrow

NORTHWEST ARCTIC BOROUGH REGION

Kotzebue

NORTON SOUND REGION

Nome

SOUTHEAST REGION

Petersburg
Sitka
Wrangell

SOUTHERN REGION

Bristol Bay Subarea

Dillingham

Kenai Peninsula Borough Subarea

Homer
Seward

Kodiak Subarea

Kodiak City

Prince William Sound Subarea

Cordova
Valdez

YUKON/KUSKOKWIM REGION

Bethel

652 Recommendations

I PERSONNEL

A ADMINISTRATION

Every **Level III Regional Center** should have:

1. A designated person to coordinate EMS activities.
2. A local EMS Council to coordinate EMS and trauma systems development, which meets at least quarterly to review responsibilities and coordinate activities.
3. Quarterly contact with regional or subarea EMS contractors.
4. Input into a regional and state trauma and EMS plans.
5. A plan for accessing Critical Incident Stress Management (CISM) for providers as needed.
6. A physician medical director who will assume the responsibilities outlined in state EMS regulations.
7. A plan for integrating local EMS and trauma activities with the EMS system components as well as other health care systems. The plan should include a special emphasis on trauma (e.g., injury prevention, surveillance, training).
8. Knowledge of how to request EMS technical assistance.

B PROVIDERS

I Prehospital Emergency Providers

Every **Level III Regional Center** should have:

1. An adequate number of EMT-Is, EMT-Is, EMT-IIIs, and Mobile Intensive Care Paramedics (MICPs):
   - Available to provide emergency medical care at all times;
   - Trained in the use of communications as appropriate for local resources; and
   - With access to physician medical consultation at all times.
2. At least two people in every high risk site, such as schools and remote occupational areas trained to the Emergency Trauma Technician level or above.
3. All active EMTs in the emergency medical service trained in extrication as appropriate.
4. Appropriately equipped first responders with early defibrillation capability.
5. All emergency medical dispatchers trained according to state or national standards.

II Air Medical Providers

Every **Level III Regional Center** should have:

1. Availability of, or access to, a state certified medevac service.
2. On those medevacs with a patient requiring advanced respiratory or cardiac support, an attendant who is a physician, mid-level provider, paramedic, RN or EMT-III with critical care skills, DHSS-approved air medical escort training, and trauma training.

III Acute Care Hospital Providers

Every **Level III Regional Center** should have:

1. For all acute care hospitals providing emergency department services, at least:
   - 24-hour, 7-day-a-week on-call coverage of the emergency department by physicians specializing in emergency medicine, or with specialized emergency care training, including: Advanced Cardiac Life Support, Advanced Trauma Life Support, and Pediatric Advanced Life Support.
   - 24-hour, 7-day-a-week, in-house coverage of the emergency department by nurses trained in trauma nursing, and certified in Advanced Cardiac Life Support and Pediatric Advanced Life Support.
   - All hospital employees with patient care responsibility trained in CPR.
   - A personal designated to coordinate organ/tissue harvesting and donation.
2. A hospital that has adequate personnel to meet the standards of an American College of Surgeons Level IV Trauma Center.

IV Injury Prevention

Every **Level III Regional Center** should have:

1. Designated personnel to coordinate and to promote community injury prevention.
2. Knowledge of, and access to, the national poison center number.

V Public Safety

Every **Level III Regional Center** should have:

1. All search and rescue personnel trained to at least the Emergency Trauma Technician level.
2. All law enforcement officers and firefighters trained to at least the Emergency Trauma Technician level.

2 TRAINING

A STANDARDS

Every **Level III Regional Center** should have:

1. Basic and advanced training programs for all levels of prehospital and clinic care providers including pediatric and trauma care, use of automated external defibrillators.
2. All emergency medical services personnel trained to applicable local, state, and national standards regarding hazardous materials, bloodborne pathogens, incident command system, emergency vehicle operations, and confined space.
3. For all emergency responders in the community, an ongoing training and continuing education program adequate to meet the recertification needs of all providers.
4. Access to state approved emergency medical dispatcher training programs.
5. An ongoing program for physicians referring patients to familiarize these physicians with critical care guidelines and patient transfer procedures of specialty care referral centers.
6. Ongoing programs to familiarize emergency staff with local social and health resource agencies (e.g., mental health, crisis response, substance abuse, family violence agencies, poison control, disaster coordination, etc.) and the standing orders and field techniques of the prehospital emergency care providers in the area.
7. An ongoing program of in-service education for all nurses with emergency department or critical care responsibilities on emergency or critical care nursing skills.
8. Access to distance delivered education through the internet and television.

B PREHOSPITAL TRAINING PERSONNEL

Every **Level III Regional Center** should have:

1. First Aid and CPR Instructors.
2. At least two active EMT-I Instructors.
3. At least one EMT-III Instructor.
4. One DHSS-approved Air Medevac Instructor.
5. A designated EMT Training Coordinator.

C HOSPITAL TRAINING PERSONNEL

Every **Level III Regional Center** should have:

1. A physician willing to assume medical direction responsibilities for BTLS or PHTLS.
2. A physician willing to assume medical director responsibilities for an ACLS.
3. A physician willing to assume medical direction responsibilities for PALS.
4. Hospital inservice personnel (training director).

3 COMMUNICATIONS

A LOCAL/REGIONAL SYSTEMS

Every **Level III Regional Center** should have:

1. Local emergency communications capability, including:
   - First responder access to the next level of emergency care providers.
   - Direct two-way communications between emergency care providers, the designated receiving facility, and their physician supervisor (s).
   - Two-way ambulance-hospital communications with tone alert.
   - Ambulances with mobile radio access to on-duty law enforcement officers.
   - Two-way communications among search and rescue personnel.
   - Two-way mobile radio communications with adjacent ambulance services.
2. For every acute care hospital:
   - Two-way communications with health care providers in the outlying communities it serves.
   - Capability to page on-call staff outside the hospital.
   - A code to notify other hospital staff of an emergency situation.

- Capability of two-way, air-ground communications with primary air services carrying patients to the hospital.
- A back-up communications system or procedures for communications during power failures and disasters.
- Communications equipment consolidated into one area for constant monitoring.
- Orientation and in-service training in use of communications equipment.

3. Certified emergency medical dispatchers capable of dispatching certified emergency personnel and directing bystander care at all times.
4. An up-to-date inventory of communications equipment used in the EMS system.
5. A local communications plan that addresses frequency compatibility between all emergency agencies, maintenance, and back-up procedures, and ensures compliance with current and planned FCC requirements.
6. New equipment procurements that fit the local and existing regional communications plans and are coordinated with the regional office.
7. Emergency care providers trained in relay of medical communications, as appropriate to their local resources.
8. One telephone number, well-advertised and toll free, preferably 911 Enhanced, to access fire, law enforcement, and emergency medical services. An alternate procedure should be arranged in case of 911 Enhanced system failure.

B STATE SYSTEM

Every **Level III Regional Center** should:

1. Have personnel who are familiar with the state EMS communications plan and how to obtain copies and/or additional information.
2. Ensure that proposed communications resources are compatible with existing and anticipated local, regional, and state communications plans and systems.

C BACK-UP AND RELIABILITY

Every **Level III Regional Center** should have:

1. A weekly test of the EMS communications system and a log which records the communications system's reliability.
2. Predetermined procedures for maintaining all emergency communications equipment.
3. A backup system for direct two-way communications between designated emergency care providers their designated receiving facilities, and their medical director (s).
4. A procedure for annual review and evaluation of the local communications plan.

4 PATIENT TRANSPORT/TRANSFER

A STANDARDS

Every **Level III Regional Center** should have:

1. Copies of the current *Alaska Trauma Triage, Transport and Transfer Guidelines* for all emergency medical services and facilities.
2. Local triage and transfer protocols.
3. An organized quality improvement program for all air medical and ground ambulance services.

B RESOURCES

I Ground Ambulances

Every **Level III Regional Center** should have:

1. A state-certified emergency medical service with advanced life support ambulance (s) on call at all times.
2. A state-certified ambulance service with a locally determined response time standard which defines the time from notification to arrival at the scene for normal emergency responses. It is recommended that the emergency medical service be on scene in 8 minutes or less. Rural communities are encouraged to meet this standard.
3. A first responder system with:
   - Response time for BLS first responders to the scene within four minutes of notification for at least 90 percent of emergencies occurring within major population areas. Rural communities should establish a standard with consideration for outlying variables.

- Written mutual aid agreements between the emergency medical ambulance service and highway first responders.

II Air Medical Services

Every **Level III Regional Center** should have:

1. Access, within a reasonable period of time, to a state-certified air medical service for transport and for interhospital transfer when appropriate. Alternate transport should be planned for when these resources are unavailable or weather hinders their use.
2. At least one hospital with a helicopter landing area near the emergency department.
3. Within 15 minutes of each hospital, a landing area with lighting for fixed-wing aircraft.
4. A current schedule of air carriers serving the community, and a list of their requirements for boarding non-ambulatory patients and other emergency patients.
5. A list of certified air medical services and air taxis for bringing in patients from outlying communities, with information on how they may be contacted, when they are available, and each aircraft's transport capabilities.
6. For every acute care hospital:
   - One person on every shift designated as a Transfer Coordinator, responsible for knowing procedures and protocols of the receiving facility, and air schedules; and arranging transfer logistics.
   - For the person (s) assigned to coordinate transfers, a checklist of actions required to prepare any patient for transfer.
   - A directory of specific capabilities of those critical care facilities available to receive transferred patients.
   - Available at all times, prepared kits of basic equipment, basic life support, adult, pediatric and specialty kits as recommended in **Section 733-Air Transport**.
   - A means to support respiration, control airways and provide high levels of oxygen during transfer to another facility.
   - On every hospital-to-hospital transfer, a qualified attendant as prescribed by the physician in charge.
   - On every hospital-to-hospital transfer, a record of the patient's pre-hospital condition, as well as initial condition and treatment in hospital.
- Specific procedures established with referring hospitals/health centers and receiving hospitals for preparation and transport of patients in each critical care area.

III Hospitals

Every **Level III Regional Center** should have:

1. An acute care hospital with:
   - A list of certified air medical services available to the community.
   - A directory of facilities with critical care capabilities available to receive transferred patients.
   - Specific procedures established between referring hospitals and accepting hospitals for preparation and transport of patients in each critical care category.
   - For the person (s) assigned to coordinate transfers, a checklist of actions required to prepare any patient for transfer.
   - For every hospital-to-hospital transfer, a record of patient's prehospital condition, as well as initial condition and treatment in hospital.
   - On all hospital-to-hospital transfers, a qualified medical attendant as prescribed by the physician in charge.
   - A means to provide ALS procedures during transfer to another facility.
   - A list of local and regional rehabilitation facilities.

C PROTOCOLS

Every **Level III Regional Center** should have:

1. Protocols for a prehospital triage system for identifying major trauma and appropriate destinations for all injured patients.
2. Transport and transfer protocols for adult and pediatric patients based on patient need and hospital resources, including specialty needs (e.g., burns, spinal cord injury).
3. Guidelines for the rapid interfacility transfer of the major trauma patient to the appropriate tertiary trauma care center.

5 FACILITIES, EQUIPMENT AND SUPPLIES

A FACILITIES

Every **Level III Regional Center** should have:

1. For those hospitals taking care of trauma patients, certification by the **American College of Surgeons** as a **Level IV Trauma Center**.
2. At least one acute care hospital equipped with:
   - Lab, blood gas, and X-ray technicians on-call at all times.
   - Adult, child, and infant resuscitation equipment, and a plan for its maintenance.
   - An area equipped to receive a cardiac patient, with oxygen, monitor/defibrillator, oral suction, and a resuscitation crash cart; and a system to check equipment every shift.
   - An emergency power source for care of critical patients in the event of power failure.
   - A system for returning equipment received with patients from outlying communities; and retrieving equipment sent with patients to other facilities.
   - Agreements with other hospitals in the region defining how resources should be shared during situations that overtax their facilities such as mass casualty disasters.
   - A security room or a procedure for keeping combative patients under observation, and to help ensure safety of staff and other patients.
   - A procedure and alarm system for protection of staff in the event of a behavioral emergency.24-hour, 7-day-a-week physician on-call emergency department coverage including:
   - protocols for notification and response of physicians and trauma team before arrival of the patient.

At least one acute care hospital with the capabilities to:

- Perform endotracheal intubation and cricothroidotomies.
- Administer oxygen and monitor oxygen concentrations.
- Support respiration artificially, both manually and mechanically through a respirator.
- Perform pleural decompression by needle thoracentesis using flutter valves, and by chest tube insertions.
- Provide Advanced Cardiac Life Support and Pediatric Advanced Life Support according to the standards of the American Heart Association.
- Use an external cardiac pacemaker on an emergency basis and have patient transfer procedures to a cardiac center.
- Stop continuous bleeding with pressure and instruments.
- Insert peripheral and central IVs on adult and pediatric patients.
- Monitor fluid resuscitation, including Foley catheterization.
- Immobilize a spinal injury until evaluation can be completed.
- Perform complex x-ray examination.
- Perform gastric lavage.
- Perform peritoneal dialysis.
- Modify a patient's core temperature.
- Splint extremities definitively.
- Debride wounds of the extremities.
- Care for complicated perinatal cases when transfer is impractical or impossible, including: emergency Cesarean section within one if adequate resources available, and fetal monitoring.

All hospitals with surgical capabilities and a general surgeon should have the capability to:

- Perform emergency intracranial decompression with neurosurgical consultation.
- Perform emergency abdominal, chest, and vascular surgery.

B EQUIPMENT AND SUPPLIES

Every **Level II Highway Sub-Regional Community** should have:

1. Trauma kits readily available for first responders, equipped as recommended in **Section 731.2**.
2. One extrication kit for first responders, equipped as recommended in **Section 731.2**.
3. Equipment and supplies appropriate for training level of EMS providers.

4. Equipment and supplies for emergency care for both pediatric and adult patients as recommended in **Section 734.2**.
5. Predetermined procedures for maintaining equipment.

6 PUBLIC SAFETY

A PUBLIC SAFETY AGENCIES

Every **Level III Regional Center** should have:

1. Coordination between public safety agencies with mutual aid agreements.

B ENVIRONMENTAL RESPONSE

Every **Level III Regional Center** should have:

1. A community plan for hazardous materials response which covers the topics in *Managing Hazardous Materials Incidents, Volume I-II* (available from the State EMS Office).
2. Personnel trained in the recognition of, and immediate response to hazardous materials emergencies. Core personnel should be trained to the hazmat first responder operations level.
3. A procedure for notifying appropriate agencies if a hazardous materials release occurs.
4. A procedure for activating local, regional, or state hazardous materials response teams in the event of a hazardous materials release, including teams trained in decontamination, treatment, and transport of seriously contaminated patients.

7 ACCESSIBILITY TO CARE

A FINANCING SERVICES

Every **Level III Regional Center** should have:

1. A plan for monitoring and documenting emergency care costs and for coordinating billing attempts with appropriate local or regional agencies.
2. A plan to assure that services are financed so the consumer's ability to pay or economic status does not interfere with delivery of services at the time of need and does not affect the quality of health services provided.
3. A data collection system that documents trauma system provider costs.

B EQUAL CARE OPPORTUNITY

Every **Level III Regional Center** should:

1. Ensure that all patients in need of EMS are provided emergency care and transportation without regard to race, creed, color, sex, national origin, disability, or ability to pay.

C SERVICE AVAILABILITY

Every **Level III Regional Center** should have:

1. All residences with telephone access to an organized ambulance service in their community, at all times.
2. 911 Enhanced telephone access available.

8 COORDINATED RECORD KEEPING

A LOCAL RECORD KEEPING

Every **Level III Regional Center** should:

1. Maintain training, personnel, and medical records as required by applicable state and federal laws.
2. Use ambulance run report forms that meet minimum state and local data requirements and provide an effective mechanism for local medical audit. There is a state minimum data set for run reports.
3. Have, for every hospital, a coordinated record system which incorporates:
   - The emergency department log,
   - Ambulance records
   - Other hospital records,
   - Trauma registry, and
   - A system allowing ambulances to pass on prehospital reports to clinics and hospitals.
4. Ensure that patient records covering the prehospital, emergency department, in-hospital and transfer phases of patient care are coordinated, enabling easy follow-up of a patient's condition and treatment.
5. Have a computerized information system for all run reports.

6. Have hospitals that offer an easily accessible discharge diagnosis data system, compatible with other hospitals in the state.
7. Ensure that emergency medical services provide summary data (the *Annual EMS Response Survey*) to subarea, regional, and state EMS agencies.
8. Ensure that EMS agencies provide appropriate data to local hospitals, regional EMS agencies, and State Department of Health and Social Services.

B REGIONAL AND STATE COORDINATION

Every **Level II Regional Center** should:

1. Ensure that Trauma Registry data and other patient care information be collected at every acute care hospital and rehabilitation facility.
2. Ensure that a copy of the original prehospital run report information be provided to every acute care hospital receiving transported patients.

9 PUBLIC INFORMATION AND EDUCATION

A ACCESS

Every **Level III Regional Center** should have:

1. A public education program to ensure that residents and visitors are familiar with the emergency care and injury prevention resources available to them, including 911 and accessing the local EMS system.

B EMERGENCY RESPONSE

Every **Level III Regional Center** should have:

1. At least one certified CPR instructor per 500 people.
2. At least one First Aid instructor per 500 people.
3. First Aid and CPR classes for all school students.
4. First Aid and CPR classes for community residents annually.
5. Access to training aids necessary for CPR and First Aid training.
6. At least 25 percent of all residents trained in CPR with information for trauma and hypothermic victims.
7. Posted procedures for accessing the local EMS system available to all school personnel for the efficient handling of injuries and other emergencies, including plans for the transport of critically injured or ill children to an appropriate facility.
8. Information available to public safety and local government personnel as to who to contact in case of a disaster.
9. A coordinator to schedule and oversee CPR and First Aid training in the community.
10. Information available to school administrators regarding teaching ETT courses in high schools.

C CONSUMER PARTICIPATION

Every **Level III Regional Center** should:

1. Encourage consumer participation in EMS and trauma care planning and policy development.
2. Identify consumers with special interest in EMS and encourage their participation in appropriate events.
3. Maintain an injury prevention resource library ..
4. Have a local EMS or health council with consumer representation with EMS and trauma experience.
5. Encourage participation in EMS and trauma care planning and policy development by business and government leaders.

10 EVALUATION

A LOCAL REVIEW

Every **Level III Regional Center** should:

1. Establish a mechanism for annual evaluation of the overall EMS program in the community, including the trauma care system, in coordination with existing state and regional EMS evaluation procedures.
2. Have a physician review all emergency response runs to determine whether the care and transfer provided were appropriate and in accordance with local, regional, and state guidelines, questionable runs should be directed to the medical director (s).
3. Establish, for every hospital, a plan to meet the Joint Commission on Accreditation of Healthcare Organizations hospital standards, and the American College of Surgeons,

Committee on Trauma standards for trauma centers.
4. For each state-certified ambulance service, have a continuous quality improvement program to evaluate trauma care and all other EMS patient care. The program should include review of trauma registry reports.
5. For each acute care hospital, have a continuous quality improvement program to evaluate trauma care and all other EMS patient care, including review of trauma registry reports.

B REGIONAL REVIEW

Every **Level III Regional Center** should:

1. Coordinate a community EMS review using the recommendations contained in *Alaska EMS Goals* every three years.

11 DISASTER RESPONSE

A COORDINATION

Every **Level III Regional Center** should:

1. Maintain an integrated all-hazard plan.
2. Be included in regional/subarea disaster plans. The plan should identify the most likely disaster threats, address these threats with action plans, define the roles and responsibilities of key public health and safety officials in the even of a disaster, and explain how regional and state disaster response resources are accessed.
3. Have disaster plans of local entities (airport, hospital, industries, military bases) incorporated into the community disaster plan.
4. Be familiar with the *Protocol for Emergency Medical Response for Mass Casualty Incidents* (available from the State EMS Office).
5. Have memoranda of agreement (MOAs) and memoranda of understanding (MOUs) with those agencies and providers that would be relied upon in emergency situations over-taxing routine procedures and resources. Agreements should include documentation of cost to allow reimbursement of expenses by the community and/or state.
6. Have a level B personal protective equipment level capability/response team
7. Have a list of resources and emergency contacts
8. Know the diseases reportable to the state and the mechanisms for reporting.
9. Have local plans which are integrated with state plans which include procedures for notifying authorities of threatened, actual or known bioterrorist events, minimizing exposures, personal safety, including recommendations on personal protective equipment, and decontamination.
10. Have of contacts for information on state plans
11. Have an account on the ADES First Class system which is checked at least once a week and more frequently in times of emergency.
12. Have personnel trained in the use of the START triage method.

B TRANSPORTATION

Every **Level III Regional Center** should have:

1. A plan for ensuring that patients can be evacuated from the community in a disaster
2. A system for retrieving equipment used in transports.
3. Identification of a secondary point for evacuation during a disaster.
4. A plan for staging, triage, and transport (including air medical) of multiple casualties.

C PERSONNEL

Every **Level III Regional Center** should have:

1. One member of the community appointed by the community leaders as the Local Disaster Preparedness Coordinator.
2. All prehospital personnel trained in the Incident Command System and familiar with the initial response to a disaster, and the ability to access additional personnel, equipment, supplies, and transportation resources.
3. Emergency personnel trained in the START (Simple Triage and Rapid Treatment) triage system.
4. Adequate community personnel trained and certified as Red Cross Shelter Managers.

D TRAINING

Every **Level III Regional Center** should have:

1. The Disaster Preparedness Coordinator complete the following FEMA Home Study Courses: *HS-1 Emergency Program Manager, HS-2 Emergency Management, USA; HS-5 Hazardous Materials: A Citizen's Orientation;* and *Professional Development Curriculum.*
2. Annual disaster exercises that include all the individuals and agencies most involved in decision making for and the response to a catastrophic event. The exercise should include the activation of the emergency operations center (EOC) and the EOC staff, and should be coordinated with regional EMS agencies.
3. All Community Shelter Managers complete a Shelter Systems Officer Course approved by the American Red Cross.

F FACILITIES AND EQUIPMENT

Every **Level III Regional Center** should:

1. Have sufficient equipment to initiate a rapid and safe disaster response.
2. Have a plan for accessing additional equipment and supplies, through mutual aid agreements or direct requests to regional and state disaster agencies.
3. Have an established plan for EMS equipment resupply and return.
4. Evaluate and designate local buildings (schools, churches, community centers) as resources in the disaster plan for sheltering.
5. Identify potential triage, treatment, and transfer sites in disaster facilities.
6. Have pre-stocked disaster supplies available in case of mass casualty disasters, as recommended in **Section 737.2**.

12 MUTUAL AID AGREEMENTS

A ESTABLISHMENT AND MAINTAINANCE

Every **Level III Regional Center** should:

1. Establish and maintain written mutual aid agreements between local emergency response agencies (e.g., EMS, fire, law enforcement, National Guard, Coast Guard, other military).
2. Have a state-certified emergency medical service with written mutual aid agreements with adjacent services for back-up support, patient transfer from service to service, equipment compatibility and retrieval.
3. Have a highway first responder system with written mutual aid agreements between the emergency medical service and highway first responders who are not part of your emergency medical service.
4. Have, for air medical evacuation more than 60 minutes from a hospital, written mutual aid agreements with certified air medical services or for helicopter or fixed-wing evacuation services. These would include:
   - Person (s) designated to make requests for service.
   - Procedures for accessing and requesting service.
   - Procedures for rendezvous.
   - Procedures for reimbursement of aircraft costs.

13 MEDICAL DIRECTION

A EMS MEDICAL DIRECTORS

Every **Level III Regional Center** should have:

1. For every emergency service:
   - A physician to serve as medical director for certified prehospital emergency care personnel, who agrees to fulfill the responsibilities of a physician medical director as outlined in the state EMS regulations.
   - Capability for receiving direct physician supervision by phone or radio.
   - Emergency medical records reviewed by the Physician Medical Director or designee at least quarterly.
   - Written guidelines for prehospital patient care recommended by the medical director, in all emergency care areas.
   - A system for on-line medical direction of prehospital/interfacility providers. The system should include on-line physician advisor or designees qualifications and responsibilities and pre-established policies, procedures, and protocols for training, triage, treatment, transport, and operations.
- Identification of a mix of health care professionals designated to provide patient care services under medical direction for both the off-line and on-line medical direction systems.

- Strategies identified to strengthen and improve the current on-line and off-line medical direction systems.

B REGIONAL/STATE EMS SYSTEM MEDICAL DIRECTORS

Every **Level III Regional Center** should:

1. Know how to contact the State/Regional EMS Medical Directors for additional information on medical direction.

14 INJURY PREVENTION

A PROGRAM DEVELOPMENT

Every **Level III Regional Center** should have:

1. A copy of the State Injury Prevention Plan and access to state injury prevention resources.
2. A community-based or regional injury prevention plan that includes:
   - an assessment of community or regional injuries;
   - goals and objectives for improving injury prevention; and
   - strategies for injury prevention programs and activities.

   The **assessment of community or regional injuries** is provided by the state Injury Surveillance and Prevention Program..
   The **goals and objectives** should include education, public policy and environmental changes to promote injury prevention based on major causes of injuries within the community or region.
   Strategies should include activities of proven effectiveness that are culturally and geographically relevant to build public awareness about injuries, programs to increase injury prevention behaviors, and provide injury prevention and survival education for all school age children.

3. Establishment of ordinances and policies that decrease the risk of injuries to community residents and visitors and make appropriate environmental changes to reduce injury events.
4. Active injury prevention programs coordinated with regional and state agencies to educate the public, change the environment, or develop ordinances to enhance safety. Examples include: boating and water safety, survival, home safety, fire prevention, helmet use, firearm safety, seat belts, and infant and child car and booster seats.

B TRAINING

Every **Level II Highway Sub-Regional Community** should:

1. Have local health, social services, education, and public safety personnel who are trained to provide injury prevention information.
2. Know how to access resources from the state, region, and national programs for injury prevention activities.

SECTION 660
LEVEL IV
SMALL CITIES

OVERVIEW

This section contains the specific EMS recommendations for **Level IV Small Cities**. (See **Section 410** for the definition of a Level IV Small City.) The recommendations are organized in a fourteen-component framework described in **Section 420**.

The section is divided into two subsections. Communities classified as **Level IV Small Cities** are listed in **Section 661**. The recommendations are shown in **Section 662**. Refer to **Section 440-Prehospital/Hospital/ Post-Hospital Index** if you need to know how these recommendations relate to the hospitals.

A **Level IV Small City** has a hospital with a 24-hour physician-staffed Emergency Department and a full continuum of care.

661 Community Listings

INTERIOR REGION

Fairbanks North Star Borough

SOUTHEAST REGION

Juneau
Ketchikan

SOUTHERN REGION

Kenai Peninsula Subarea

Soldotna

Matanuska-Susitna Subarea

Palmer

Anchorage and Cook Inlet Subarea

Elmendorf Air Force Base (military)

662 Recommendations

I PERSONNEL

A ADMINISTRATION

Every **Level IV Small City** should have:

1. Municipal ordinance (s) that gives appropriate authority to the lead agency.
2. An EMS agency to coordinate EMS and trauma care activities.
3. A local EMS Council to coordinate EMS and trauma systems development, which meets at least quarterly to review responsibilities and coordinate activities.
4. Input into regional and state trauma and EMS plans.
5. A plan for accessing Critical Incident Stress Management (CISM) for providers as needed.
6. Physician medical director (s) who assume the responsibilities outlined in state EMS regulations.
7. A plan for integrating local EMS and trauma activities with the EMS system components as well as other health care systems.
8. An annual plan of action with local EMS and trauma objectives based on quality improvement patient outcome data.
9. Persons trained in injury prevention.
10. A plan for financing the EMS and trauma system, which addresses at least:
    - EMS and trauma system administration and development,
    - Data collection,
    - Non-reimbursed costs, and
    - Under-compensated/uncompensated care.

B PROVIDERS

I Prehospital Emergency Providers

Every **Level IV Small City** should have:

1. An adequate number of EMT-Is, EMT-Is, EMT-IIIs, and Mobile Intensive Care Paramedics (MICPs):
    - Available to provide emergency medical care at all times;
    - Trained in the use of communications as appropriate for local resources; and
    - With access to on-line physician medical consultation at all times.
2. At least two people in every high risk site, such as schools and remote occupational areas trained to the Emergency Trauma Technician level or preferably to the EMT-I level.
3. All active EMTs in the emergency medical service trained in extrication as appropriate.
4. Appropriately equipped first responders with early defibrillation capability.
5. All emergency medical dispatchers trained according to state or national standards.

II Air Medical Providers

Every **Level IV Small City** should have:

1. At least one certified medevac or air ambulance service available to the community staffed by personnel trained to at least the EMT-III level, with DHSS-approved air medical escort and trauma training, available to accompany injured or ill patients during air transport to and from the hospital, or access to an equivalent service.
2. On those medevacs with a patient requiring advanced respiratory or cardiac support, an attendant who is a physician, mid-level provider, paramedic, RN or EMT-III with critical care skills, DHSS-approved air medical escort training, and trauma training.

III Acute Care Hospital Providers

Every **Level IV Small City** should have:

1. For all acute care hospitals providing emergency department services, at least:
    - 24-hour, 7-day-a-week in-house coverage of the emergency department by physicians specializing in emergency medicine, or with specialized emergency care training, including: Advanced Cardiac Life Support, Advanced Trauma Life Support, and Pediatric Advanced Life Support.
    - 24-hour, 7-day-a-week, in-house coverage of the emergency department by nurses trained in trauma nursing, and certified in Advanced Cardiac Life

Support and Pediatric Advanced Life Support.
- All hospital employees with patient care responsibility certified in CPR.
- A personal designated to coordinate organ/tissue harvesting and donation.
- A medical or mental health social worker available for staff and patient consultation.

2. A hospital that has adequate personnel to meet the standards of an American College of Surgeons Level III Trauma Center.

IV Injury Prevention Specialists

Every **Level IV Small City** should have:

1. Designated personnel to coordinate and to promote community injury prevention.
2. Knowledge of, and access to, the national poison control number.

V Public Safety Personnel

Every **Level IV Small City** should have:

1. All search and rescue personnel trained to at least the Emergency Trauma Technician level.
2. All law enforcement officers and firefighters trained to at least the Emergency Trauma Technician level.

2 TRAINING

A STANDARDS

Every **Level IV Small City** should have:

1. Basic and advanced training programs for all levels of prehospital and clinic care providers including pediatric and trauma care, and use of automated external defibrillators.
2. All emergency medical services personnel trained to applicable local, state, and national standards regarding hazardous materials, bloodborne pathogens, incident command system, emergency vehicle operations, and confined space.
3. For all emergency responders in the community, an ongoing training and continuing education program adequate to meet the recertification needs of all providers.
4. Access to state approved emergency medical dispatcher training programs.
5. An ongoing program for physicians referring patients to familiarize these physicians with critical care guidelines and patient transfer procedures of specialty care referral centers.
6. Ongoing programs to familiarize emergency staff with local social and health resource agencies (e.g., mental health, crisis response, substance abuse, family violence agencies, poison control, disaster coordination, etc.) and the standing orders and field techniques of the prehospital emergency care providers in the area.
7. An ongoing program of in-service education for all nurses with emergency department or critical care responsibilities on emergency or critical care nursing skills.
8. Ability to provide distance delivered education through the internet and television.

B PREHOSPITAL TRAINING PERSONNEL

Every **Level IV Small City** should have:

1. First Aid and CPR Instructors.
2. At least two active EMT-I Instructors.
3. At least two active EMT-III Instructors.
4. At least one DHSS-approved Air Medevac Instructor.
5. A designated EMT Training Coordinator.
6. At least one instructor for each of the following: ACLS PALS, and extrication.

C HOSPITAL TRAINING PERSONNEL

Every **Level IV Small City** should have:

1. A physician willing to assume medical director responsibilities for an ACLS.
2. A physician willing to assume medical direction responsibilities for PALS.
3. Hospital inservice personnel (training director).

3 COMMUNICATIONS

A LOCAL/REGIONAL SYSTEMS

Every **Level IV Small City** should have:

1. Local emergency communications capability, including:

- First Responder access to the next level of emergency care providers.
- Direct two-way communications between emergency care providers, the designated receiving facility, and their medical director (s).
- Two-way ambulance-hospital communications with tone alert.
- Ambulances with mobile radio access to on-duty law enforcement officers.
- Two-way communications among search and rescue personnel.
- Two-way mobile radio communications with adjacent ambulance services.

2. For every acute care hospital:
   - Two-way communications with health care providers in the outlying communities it serves.
   - Capability to page on-call staff outside the hospital.
   - A code to notify other hospital staff of an emergency situation.
   - Capability of two-way, air-ground communications with all air services carrying patients to the hospital.
   - A back-up communications system or procedures for communications during power failures and disasters.
   - Communications equipment consolidated into one area for constant monitoring.
   - Orientation and in-service training in use of communications equipment.
3. Certified emergency medical dispatchers capable of dispatching certified emergency personnel and directing bystander care at all times.
4. An up-to-date inventory of communications equipment used in the EMS system.
5. A local communications plan that addresses frequency compatibility between all emergency agencies, maintenance, and back-up procedures, and ensures compliance with current and planned FCC requirements.
6. New equipment procurements that fit the local and regional communications plans and are coordinated with the regional office.
7. One telephone number, well-advertised and toll free, preferably 911 Enhanced, to access fire, law enforcement, and emergency medical services. An alternate procedure should be arranged in case of 911 Enhanced system failure.

B STATE SYSTEM

Every **Level IV Small City** should:

1. Have personnel who are familiar with all applicable EMS communications plans and how to obtain additional information about them.
2. Ensure that proposed communications resources are compatible with existing and anticipated local, regional, and state communications plans and systems.

C BACK-UP AND RELIABILITY

Every **Level IV Small City** should have:

1. A weekly test of the EMS communications system and a log which records the communications system's reliability.
2. Predetermined procedures for maintaining all emergency communications equipment.
3. A backup system for direct two-way communications between designated emergency care providers their designated receiving facilities, and their medical director (s).
4. A procedure for annual review and evaluation of the local communications plan.

4 PATIENT TRANSPORT/TRANSFER

A STANDARDS

Every **Level IV Small City** should have:

1. Copies of the current *Alaska Trauma Triage, Transport and Transfer Guidelines* for all emergency medical services and facilities.
2. Local triage and transfer protocols.
3. An organized quality improvement program for all air medical and ground ambulance services.

B RESOURCES

I Ground Ambulances

Every **Level IV Small City** should have:

1. A state-certified Advanced Life Support (ALS) service with EMT-IIIs or Mobile Intensive Care Paramedics providing 24-hour, 7 day-a-week coverage.

2. Ground ambulance services with a configuration and staffing to assure:
   - MICPs or EMT-IIIs able to arrive at the scene within 8 minutes of a call for 90 percent of emergencies occurring within major populated areas.
   - First responders with Basic Life Support training and early defibrillation on the scene within 4 minutes of call for 90 percent of emergencies occurring within major population areas.

II Air Medical Services

Every **Level IV Small City** should have:

1. Access, within a reasonable period of time, to a state-certified air medical service for transport and for interhospital transfer when appropriate. Alternate transport should be planned for when these resources are unavailable or weather hinders their use.
2. At least one hospital with a helicopter landing area near the emergency department.
3. Within 15 minutes of each hospital, a landing area with lighting for fixed-wing aircraft.
4. A current schedule of air carriers serving the community, and a list of their requirements for boarding stretcher patients or other emergency patients.
5. A list of certified air medical services and air taxis for bringing in patients from outlying communities, with information on how they may be contacted, when they are available, and each aircraft's transport capabilities.
6. For every acute care hospital:
   - One person on every shift designated as a Transfer Coordinator, responsible for knowing procedures and protocols of the receiving facility, and air schedules; and arranging transfer logistics.
   - For the person (s) assigned to coordinate transfers, a checklist of actions required to prepare any patient for transfer.
   - A directory of specific capabilities of those critical care facilities available to receive transferred patients.
   - Available at all times, prepared kits of basic equipment, basic life support, adult, pediatric and specialty kits as recommended in **Section 733-Air Transport**.
   - A means to support respiration, control airways and provide high levels of oxygen during transfer to another facility.
   - On every hospital-to-hospital transfer, a qualified attendant as prescribed by the physician in charge.
   - On every hospital-to-hospital transfer, a record of the patient's pre-hospital condition, as well as initial condition and treatment in hospital.
   - Specific procedures established with referring hospitals/health centers and receiving hospitals for preparation and transport of patients in each critical care area.

III Hospitals

Every **Level IV Small City** should have:

1. An acute care hospital with:
   - A list of certified medevac services available to the community.
   - A directory of facilities with critical care capabilities available to receive transferred patients.
   - Specific procedures established between referring hospitals and accepting hospitals for preparation and transport of patients in each critical care category.
   - For the person (s) assigned to coordinate transfers, a checklist of actions required to prepare any patient for transfer.
   - For every hospital-to-hospital transfer, a record of patient's prehospital condition, as well as initial condition and treatment in hospital.
   - On all hospital-to-hospital transfers, a qualified medical attendant as prescribed by the physician in charge.
- A means to provide ALS procedures during transfer to another facility.
- A list of local and regional rehabilitation facilities.

C PROTOCOLS

Every **Level IV Small City** should have:

1. Protocols for a prehospital triage system for identifying major trauma and appropriate destinations for all injured patients.
2. Transport protocols based on patient need and hospital resources, including specialty

needs (e.g., pediatrics, critical care, burns, spinal cord injury).
3. Guidelines for the rapid interfacility transfer of the major trauma patient to the appropriate tertiary trauma care center.
4. An on-call schedule of consultants utilized in each critical care area.

5 FACILITIES, EQUIPMENT AND SUPPLIES

A FACILITIES

I Hospitals

Every **Level IV Small City** should have:

1. For those hospitals taking care of trauma care patients, certification by the American College of Surgeons as a Level III Trauma Center.
2. At every hospital:
   - Lab, blood gas, and X-ray technicians in-house, 24 hours-a-day.
   - Adult, child, and infant resuscitation equipment, and a plan for its maintenance.
   - An area equipped to receive a cardiac patient, with oxygen, monitor/defibrillator, oral suction, and a resuscitation crash cart; and a system to check equipment every day.
   - An emergency power source for care of critical patients in the event of power failure.
   - A system for returning equipment received with patients from outlying communities; and retrieving equipment sent with patients to other facilities.
   - Agreements with other hospitals in the community or region defining how resources should be shared during situations that overtax their facilities such as mass casualty disasters.
   - A security room or a procedure for keeping combative patients under observation, and to help ensure safety of staff and other patients.
   - A procedure and alarm system for protection of staff in the event of a behavioral emergency.
3. 24-hour, 7-day-a-week physician in-house emergency department coverage including:
   - Protocols for notification and response of physicians and trauma team before arrival of the patient.
4. For every Acute Care Hospital, the capabilities to:
- Perform endotracheal intubation and cricothroidotomies.
   - Administer oxygen and monitor oxygen concentrations.
   - Support respiration artificially, both manually and mechanically through a respirator.
   - Perform pleural decompression by needle thoracentesis using flutter valves, and by chest tube insertions.
   - Provide Advanced Cardiac Life Support and Pediatric Advanced Life Support according to the standards of the American Heart Association.
   - Use an external cardiac pacemaker on an emergency basis and have patient transfer procedures to a cardiac center.
   - Stop continuous bleeding with pressure and instruments.
   - Insert peripheral and central IVs on adult and pediatric patients.
   - Monitor fluid resuscitation, including Foley catheterization.
   - Immobilize a spinal injury until evaluation can be completed.
   - Perform complex x-ray examination.
   - Perform gastric lavage.
   - Perform peritoneal dialysis.
   - Modify a patient's core temperature.
   - Splint extremities definitively.
   - Debride wounds of the extremities.
   - Care for complicated perinatal cases when transfer is impractical or impossible, including emergency Cesarean section within one hour on a 24-hour basis, and fetal monitoring.
5. All hospitals with surgical capabilities and a general surgeon should have the capability to:
- Perform emergency intracranial decompression with neurosurgical consultation.
- Perform emergency abdominal, chest, and vascular surgery.

II Specialty Care Centers

A – Trauma Care

Every **Level IV Small City** should have:

1. At least one hospital capable of optimum treatment of multiple injuries, according to American College of Surgeons Level III Trauma Center Standards.
2. For all hospitals accepting patients from other hospitals for treatment of multiple injuries:
   - Surgical specialists, when available, using a multi-disciplinary approach to multiple injuries.
   - Personnel for X-ray and laboratory in the building 24 hours a day.
   - An intensive care unit with staff trained in critical care.
   - Respiratory therapy personnel in the building or on a 20-minute call back basis.
   - Sophisticated visual imaging diagnostic equipment.

B – Cardiac Emergency Care

Every **Level IV Small City** should have:

1. An acute care hospital with the ability to identify cardiac disease, institute initial treatment, and refer to cardiac specialty centers when appropriate.

C – Head, Neck and Spinal Injury Care

Every **Level IV Small City** should have:

1. Hospitals caring for patients with head and spinal injuries should have:
   - 24-hour availability of an orthopedist.
   - For spinal injuries only: beds and equipment for the management of injured spine patients for up to one week, including surgical management with neurological consultation if indicated; nursing staff trained in care and transporting of patients to a spinal cord center; physical therapy; and specialized neuro-radiological capability.
   - Identified spinal cord injury centers to which they may transfer patients for continued rehabilitation.
   - Written guidelines for the treatment and transfer of head and spinal injury patients, for facilities sending in patients.
   - The capability to perform emergency intracranial decompression with neurosurgical consultation.

D – Thermal Injury Care

Every **Level IV Small City** should have:

1. For those hospitals accepting patients with moderate to major thermal injuries:
   - Physicians and nurses with thermal injury training; respiratory therapist; physical therapist with splinting experience; nutritionist; medical social worker; and prosthetics consultation.
   - Lab and X-ray personnel in building 24 hours a day.
   - A designated care area providing for the patient's isolation needs, with hydrotherapy in close proximity.
   - Equipment for a thermal controlled environment.
   - Criteria for identifying patients requiring transfer, and protocols for transferring them to a recognized thermal injury center for care and rehabilitation, based on American Burn Association standards and the thermal injury center to which they transfer.
   - Written protocols on the treatment of thermal injury patients, for facilities sending in patients.

E – Perinatal Emergency Care

Every **Level IV Small City** should have:

1. For those hospitals accepting patients for acute perinatal and neonatal care:
   - A designated neonatal care team, including a pediatrician, nurses with special neonatal training, respiratory therapist, nutritionist, medical social worker, and biomedical engineer.
   - Diagnostic lab services to assess fetal and maternal well-being, including diagnostic ultrasound, available 24 hours a day.
   - 24-hour capability to provide oxygen therapy for small and ill infants, and the ability to monitor inspired oxygen concentration and arterial blood gases.
   - Capability to continuously monitor vital functions such as heart rate, blood pressure, respiration and temperature.
   - Capability to use assisted ventilation.

- Criteria established by the neonatal care team to identify which infants can be cared for in their facility, and which require transfer to higher level neonatal center.
- For referring hospitals, information on their capabilities and written protocols on stabilization and transfer of infants to the most appropriate neonatal care facility.

F – Poisoning Care

Every **Level IV Small City** should have:

- a system for advertising the national toll-free poison center number.
- a system for obtaining data about the frequency and types of poisoning within the community.
- a plan for reducing the number of accidental and intentional poisonings.
- .

G – Behavioral Emergency Care

Every **Level IV Small City** should have:

1. An identified facility to which patients with severe behavioral problems are transferred and protocols for their transfer.
2. Transfer agreements between hospitals and the facility receiving patients with severe behavioral problems, which specify the agency which will provide transport personnel.

H – Pediatric Emergency Care

Every **Level IV Small City** should have:

1. For all hospitals, the capability of initiating resuscitation of the injured child with the capability to treat or transport the most severely injured children. This requires medical specialists appropriately credentialled to provide pediatric care, equipment necessary for resuscitation and transport of injured infants and children, and a designated emergency department area with appropriately trained staff and readily available pediatric equipment.

B EQUIPMENT AND SUPPLIES

Every **Level IV Small City** should have:

1. Trauma kits readily available for first responders, equipped as recommended in **Section 731**.
2. One extrication kit for first responders, equipped as recommended in **Section 731**.
3. Equipment and supplies appropriate for training level of EMS providers.
4. Equipment and supplies for emergency care for both pediatric and adult patients as recommended in **Section 732**.
5. Predetermined procedures for maintaining equipment.

6 PUBLIC SAFETY

A PUBLIC SAFETY AGENCIES

Every **Level IV Small City** should have:

1. Coordination between public safety agencies with mutual aid agreements.

B ENVIRONMENTAL RESPONSE

Every **Level IV Small City** should have:

1. A community plan for hazardous materials response
2. Personnel trained in the recognition of, and immediate response to hazardous materials emergencies. Core personnel should be trained to the hazmat technician level.
3. A procedure for notifying appropriate agencies if a hazardous materials release occurs.
4. A procedure for activating local, regional, or state hazardous materials response teams in the event of a hazardous materials release, including teams trained in decontamination, treatment, and transport of seriously contaminated patients.

7 ACCESSIBILITY TO CARE

A FINANCING SERVICES

Every **Level IV Small City** should have:

1. A plan for monitoring and documenting emergency care costs and for coordinating billing attempts with appropriate local or regional agencies.
2. A plan to assure that services are financed so the consumer's ability to pay or economic status does not interfere with delivery of

services at the time of need and does not affect the quality of health services provided.
3. A data collection system that documents trauma system provider costs.

B EQUAL CARE OPPORTUNITY

Every **Level IV Small City** should:

1. Ensure that all patients are provided emergency care and transportation without regard to race, creed, color, sex, national origin, disability, or ability to pay.

C SERVICE AVAILABILITY

Every **Level IV Small City** should have:

1. All residences with telephone access to an organized ambulance service in their community, at all times.
2. 911 Enhanced telephone access available.

8 COORDINATED RECORD KEEPING

A LOCAL RECORD KEEPING

Every **Level IV Small City** should:

1. Maintain training, personnel, and medical records as required by applicable state and federal laws.
2. Use ambulance run report forms which meet minimum state and local data requirements and provide an effective mechanism for local medical audit. There is a state minimum data set for run reports.
3. Have, for every hospital, a coordinated record system which incorporates:
   - The emergency department log,
   - Ambulance records
   - Other hospital records,
   - Trauma registry, and
   - A system allowing ambulances to pass on prehospital reports to clinics and hospitals.
4. Ensure that patient records covering the prehospital, emergency department, in-hospital and transfer phases of patient care are coordinated, enabling easy follow-up of a patient's condition and treatment.
5. Have a computerized information system for all run reports.
6. Have hospitals that offer an easily accessible discharge diagnosis data system, compatible with other hospitals in the state.
7. Ensure that emergency medical services provide summary data (the *Annual EMS Response Survey*) to subarea, regional, and state EMS agencies.

B REGIONAL AND STATE COORDINATION

Every **Level II Regional Center** should:

1. Ensure that Trauma Registry data and other patient care information be collected at every acute care hospital and rehabilitation facility.
2. Ensure that a copy of the original prehospital run report information be provided to every acute care hospital receiving transported patients.

9 PUBLIC INFORMATION AND EDUCATION

A ACCESS

Every **Level IV Small City** should have:

1. A public education program to ensure that residents and visitors are familiar with the emergency care and injury prevention resources available to them, including 911 and accessing the local EMS system.

B EMERGENCY RESPONSE

Every **Level IV Small City** should have:

1. At least one certified CPR instructor per 500 people.
2. At least one First Aid instructor per 500 people.
3. First Aid and CPR classes for all school students.
4. First Aid and CPR classes for community residents annually.
5. Access to training aids necessary for CPR and First Aid training.
6. At least 25 percent of all residents trained in CPR with information for trauma and hypothermic victims.
7. Posted procedures for accessing the local EMS system available to all school personnel for the efficient handling of injuries and other emergencies, including

plans for the transport of critically injured or ill children to an appropriate facility.
8. Information available to public safety and local government personnel as to who to contact in case of a disaster.
9. A coordinator to schedule and oversee CPR and First Aid training in the community. This person should coordinate with the Regional EMS Office.
10. An active ETT in the high school program.

C CONSUMER PARTICIPATION

Every **Level IV Small City** should:

1. Encourage consumer participation in EMS and trauma care planning and policy development.
2. Identify consumers with special interest in EMS and encourage their participation in appropriate events.
3. Maintain a library of injury prevention resources ..
4. Have a local EMS or health council with consumer representation with EMS and trauma experience.
5. Encourage participation in EMS and trauma care planning and policy development by business and government leaders.

10 EVALUATION

A LOCAL REVIEW

Every **Level IV Small City** should:

1. Establish a mechanism for annual evaluation of the overall EMS program in the community, including the trauma care system, in coordination with existing state and regional EMS evaluation procedures.
2. Have a physician medical director review all emergency response runs to determine whether the care and transfer provided were appropriate and in accordance with local, regional, and state guidelines.
3. Establish, for every hospital, a plan to meet the Joint Commission on Accreditation of Healthcare Organizations hospital standards, and the American College of Surgeons, Committee on Trauma standards for trauma centers.
4. For each state-certified ambulance service, have a continuous quality improvement program to evaluate trauma care and all other EMS patient care.
5. For each acute care hospital, have a continuous quality improvement program to evaluate trauma care and all other EMS patient care.

B REGIONAL REVIEW

Every **Level IV Small City** should:

1. Coordinate a community EMS review using the recommendations contained in *Alaska EMS Goals* every three years.

C STATE REVIEW

Every **Level IV Small City** should:

1. Participate in the state patient care review process.

11 DISASTER RESPONSE

A COORDINATION

Every **Level IV Small City** should:

1. Maintain an integrated all-hazard plan.
2. Be included in a state/regional/subarea disaster plan. The plan should identify the most likely disaster threats, address these threats with action plans, define the roles and responsibilities of key public health and safety officials in the event of a disaster, and explain how regional and state disaster response resources are accessed.
3. Have disaster plans of local entities (airport, hospital, industries, military bases) incorporated into the community disaster plan.
4. Be familiar with the *Protocol for Emergency Medical Response for Mass Casualty Incidents* (available from the State EMS Office).
5. Have memoranda of agreement (MOAs) and memoranda of understanding (MOUs) with those agencies and providers that would be relied upon in emergency situations over-taxing routine procedures and resources. Agreements should include documentation of cost to allow reimbursement of expenses by the community and/or state.
6. Level A personal protective equipment level capability/response team
7. A list of resources and emergency contacts
8. Knowledge of diseases reportable to the state

9. Local plans which are integrated with state plans which include procedures for notifying authorities of threatened, actual or known bioterrorist events, minimizing exposures, personal safety, including recommendations on personal protective equipment, and decontamination.
10. Knowledge of contacts for information on state plans
11. An account on the ADES First Class system which is checked at least once a day and more frequently in times of emergency.
12. Have personnel trained in the use of the START triage method.

B TRANSPORTATION

Every **Level IV Small City** should have:

1. A plan for ensuring that patients can be evacuated from the community in a disaster
2. A system for retrieving equipment used in transports.
3. Identification of a secondary point for evacuation during a disaster.
4. A plan for staging, triage, and transport (including air medical) of multiple casualties.

C PERSONNEL

Every **Level IV Small City** should have:

1. A full-time Disaster Preparedness Coordinator.
2. All prehospital personnel trained in the Incident Command System and familiar with the initial response to a disaster, and the ability to access additional personnel, equipment, supplies, and transportation resources.
3. EMS personnel trained in the START (Simple Triage and Rapid Treatment) triage system.
4. Adequate community personnel trained and certified as Red Cross Shelter Managers.

D TRAINING

Every **Level IV Small City** should have:

1. The Disaster Preparedness Coordinator complete the following FEMA Home Study Courses: *HS-1 Emergency Program Manager, HS-2 Emergency Management, USA; HS-5 Hazardous Materials: A Citizen's Orientation; and Professional Development Curriculum.*
2. Annual disaster exercises that include all the individuals and agencies most involved in decision making for and the response to a catastrophic event. The exercise should include the activation of the emergency operations center (EOC) and the EOC staff, and should be coordinated with regional EMS agencies.
3. All Community Shelter Managers complete a Shelter Systems Officer Course approved by the American Red Cross.

F FACILITIES AND EQUIPMENT

Every **Level IV Small City** should:

1. Have sufficient equipment to initiate a rapid and safe disaster response.
2. Have a plan for accessing additional equipment and supplies, through mutual aid agreements or direct requests to regional and state disaster agencies.
3. Have an established plan for EMS equipment resupply and return.
4. Evaluate and designate local buildings (schools, churches, community centers) as resources in the disaster plan for sheltering.
5. Identify potential triage, treatment, and transfer sites in disaster facilities.
6. Have pre-stocked disaster supplies available in case of mass casualty disasters, as recommended in **Section 737**.

12 MUTUAL AID AGREEMENTS

A ESTABLISHMENT AND MAINTAINANCE

Every **Level IV Small City** should:

1. Establish and maintain written mutual aid agreements between local emergency response agencies (e.g., EMS, fire, law enforcement, National Guard, Coast Guard, other military).
2. Have a state-certified emergency medical service with written mutual aid agreements with adjacent services for back-up support, patient transfer from service to service, equipment compatibility and retrieval.
3. Have a highway first responder system with written mutual aid agreements between the emergency medical service and highway

first responders who are not part of your emergency medical service.

4. Have, for air medical evacuation more than 60 minutes from a hospital, written mutual aid agreements with certified air medical services or for helicopter or fixed-wing evacuation services. These would include:

- Person (s) designated to make requests for service.
- Procedures for accessing and requesting service.
- Procedures for rendezvous.
- Procedures for reimbursement of aircraft costs.

13 MEDICAL DIRECTION

A EMS MEDICAL DIRECTORS

Every **Level IV Small City** should have:

1. For every emergency service:
   - A physician to serve as medical director for certified prehospital emergency care personnel, who agree to fulfill the responsibilities of a physician medical director as outlined in the state EMS regulations.
   - Capability for receiving direct physician supervision by phone or radio.
   - Emergency medical records reviewed by the Physician Medical Director or designee at least monthly.
   - Written guidelines for prehospital patient care recommended by the medical director, in all emergency care areas.
   - A system for on-line medical direction of prehospital/interfacility providers. The system should include on-line physician advisor or designees qualifications and responsibilities and pre-established policies, procedures, and protocols for training, triage, treatment, transport, and operations.
   - Identification of a mix of health care professionals designated to provide patient care services under medical direction for both the off-line and on-line medical direction systems.
   - Strategies identified to strengthen and improve the current on-line and off-line medical direction systems.

B REGIONAL/STATE EMS SYSTEM MEDICAL DIRECTORS

Every **Level IV Small City** should:

1. Know how to contact the State/Regional EMS Medical Directors for additional information on medical direction.

14 INJURY PREVENTION

A PROGRAM DEVELOPMENT

Every **Level IV Small City** should have:

1. A copy of the State Injury Prevention Plan and access to state injury prevention resources.
2. A community-based or regional injury prevention plan that includes:
   - an assessment of community or regional injuries;
   - goals and objectives for improving injury prevention; and
   - strategies for injury prevention programs and activities.

   The **assessment of community or regional injuries** is provided by the state Injury Surveillance and Prevention Program..
   The **goals and objectives** should include education, public policy and environmental changes to promote injury prevention based on major causes of injuries within the community or region.
   Strategies should include activities of proven effectiveness that are culturally and geographically relevant to build public awareness about injuries, programs to increase injury prevention behaviors, and provide injury prevention and survival education for all school age children.

3. Establishment of ordinances and policies that decrease the risk of injuries to community residents and visitors and make appropriate environmental changes to reduce injury events.
4. Active injury prevention programs coordinated with regional and state agencies to educate the public, change the environment, or develop ordinances to enhance safety. Examples include: boating and water safety, survival, home safety, fire prevention, helmet use, firearm safety, seat

belts, and infant and child car and booster seats.

B TRAINING

Every **Level IV Small City** should:

1. Have local health, social services, education, and public safety personnel who are trained to provide injury prevention information.
2. Know how to access resources from the state, region, and national programs for injury prevention activities.

SECTION 670
LEVEL V
URBAN CENTERS

OVERVIEW

This section contains the specific EMS recommendations for **Level V Urban Centers**. (See **Section 410** for the definition of a Level V Urban Center.) The recommendations are organized in a fourteen-component framework described in **Section 420**.

The section is divided into two subsections. Communities classified as **Level V Urban Centers** are listed in **Section 671**. The recommendations are shown in **Section 672**. Refer to **Section 440-Prehospital/Hospital/ Post-Hospital Index** if you need to know how these recommendations relate to the hospitals.

A **Level V Urban Center** has specialized medical and rehabilitation services for high and low incidence problems. These communities also have resources that other levels of community will need access to, such as instructors for prehospital training programs.

671 Community Listings

SOUTHERN REGION

Anchorage and Cook Inlet Subarea

Anchorage

672 Recommendations

I PERSONNEL

A ADMINISTRATION

Every **Level V Urban Center** should have:

1. Municipal ordinance (s) that gives appropriate authority to the lead agency.
2. A lead agency to coordinate EMS and trauma care activities.
3. A local EMS Council to coordinate EMS and trauma systems development, which meets at least quarterly to review responsibilities and activities. EMS Council meetings should be documented.
4. Input into regional and state trauma and EMS plans.
5. A plan for accessing Critical Incident Stress Management (CISM) for providers as indicated.
6. Physician medical director (s) who assume the responsibilities outlined in state EMS regulations.
7. A plan for integrating local EMS and trauma activities with the EMS system components as well as other health care systems.
8. An annual plan of action with local EMS and trauma objectives based on quality improvement patient outcome data.
9. Persons trained in injury prevention.
10. A plan for financing the EMS and trauma system, which addresses at least:
    - EMS and trauma system administration and development,
    - Data collection,
    - Non-reimbursed costs, and
    - Under-compensated/uncompensated care.

B PROVIDERS

I Prehospital Emergency Providers

Every **Level V Urban Center** should have:

1. An adequate number of EMT-Is, EMT-IIs, EMT-IIIs, and Mobile Intensive Care Paramedics (MICPs):
    - Available to provide emergency medical care at all times;
    - Trained in the use of communications as appropriate for local resources; and
    - With access to on-line physician medical consultation at all times.
2. At least two people in every high risk site, such as schools and remote occupational areas trained to the Emergency Trauma Technician level or preferably to the EMT-I level.
3. Key active EMTs in the emergency medical service trained in Advanced Cardiac Life Support; and in Pediatric Advanced Life Support and extrication as appropriate.
4. Appropriately equipped first responders with early defibrillation capability.
5. All emergency medical dispatchers trained according to state or national standards and certified by the Department of Health and Social Services as EMDs.

II Air Medical Providers

Every **Level V Urban Center** should have:

1. At least one certified air ambulance service in the community staffed by personnel trained to at least the Mobile Intensive Care Paramedic (MICP) or RN level, with air medical training, available to accompany injured or ill patients during air transport to and from the hospital.
2. On those medevacs with a patient requiring advanced respiratory or cardiac support, an attendant who is a physician, mid-level provider, paramedic, or RN with critical care skills, DHSS-approved air medical escort training, and trauma training.

III Acute Care Hospital Providers

Every **Level V Urban Center** should have:

1. For all acute care hospitals providing emergency department services, at least:
    - 24-hour, 7-day-a-week in-house coverage of the emergency department by physicians specializing in emergency medicine, or with specialized emergency care training, including: Advanced Cardiac Life Support, Advanced Trauma Life Support, and Pediatric Advanced Life Support.
    - 24-hour, 7-day-a-week, in-house coverage of the emergency department by nurses trained in trauma nursing, and certified in Advanced Cardiac Life

Support and Pediatric Advanced Life Support.
- All hospital employees with patient care responsibility certified in CPR.
- A personal designated to coordinate organ/tissue harvesting and donation.
- A medical or mental health social worker available for staff and patient consultation.

2. A hospital that has adequate personnel to meet the standards of an **American College of Surgeons Level II Trauma Center**.

IV Injury Prevention Specialists

Every **Level V Urban Center** should have:

1. Designated personnel to coordinate and to promote community injury prevention.
2. Knowledge of, and access to, the national poison control number.

V Public Safety Personnel

Every **Level V Urban Center** should have:

1. All search and rescue personnel trained to at least the Emergency Trauma Technician level.
2. All law enforcement officers and firefighters trained to at least the Emergency Trauma Technician level.

2 TRAINING

A STANDARDS

Every **Level V Urban Center** should have:

1. Basic and advanced training programs for all levels of prehospital and clinic care providers including pediatric and trauma care, and use of automated external defibrillators.
2. All emergency medical services personnel trained to applicable local, state, and national standards regarding hazardous materials, bloodborne pathogens, incident command system, emergency vehicle operations, and confined space.
3. For all emergency responders in the community, an ongoing training and continuing education program adequate to meet the recertification needs of all providers.
4. Access to state approved emergency medical dispatcher training programs.
5. An ongoing program for physicians referring patients to familiarize these physicians with critical care guidelines and patient transfer procedures of specialty care referral centers.
6. Ongoing programs to familiarize emergency staff with local social and health resource agencies (e.g., mental health, crisis response, substance abuse, family violence agencies, poison control, disaster coordination, etc.) and the standing orders and field techniques of the prehospital emergency care providers in the area.
7. An ongoing program of in-service education for all nurses with emergency department or critical care responsibilities on emergency or critical care nursing skills.
8. Periodic Mobile Intensive Care Paramedic courses sufficient to maintain MICP staffing levels and to deal with increases in populations and service area sizes.
9. Ability to provide distance delivered education through the internet and television.

B PREHOSPITAL TRAINING PERSONNEL

Every **Level V Urban Center** should have:

1. First Aid and CPR Instructors.
2. At least five active EMT-I Instructors.
3. At least three active EMT-III Instructors.
4. Three DHSS-approved Air Medevac Instructors.
5. A designated EMS Training Coordinator.
6. At least one instructor for each of the following: ACLS, PALS, and extrication.
7. At least one MICP course coordinator certified in accordance with applicable EMS regulations.
8. A program for providing preceptorships for EMS personnel from outside the community.

C HOSPITAL TRAINING PERSONNEL

Every **Level V Urban Center** should have:

1. A physician willing to assume medical direction responsibilities for BTLS or PHTLS training.
2. A physician willing to assume medical director responsibilities for an ACLS.

3. A physician willing to assume medical director responsibilities for PALS.
4. A physician willing to assume medical director responsibilities for ATLS.
5. Hospital inservice personnel (training director).

3 COMMUNICATIONS

A LOCAL/REGIONAL SYSTEMS

Every **Level V Urban Center** should have:

1. Local emergency communications capability, including:
   - First Responder access to the next level of emergency care providers.
   - Direct two-way communications between emergency care providers, the designated receiving facility, and their physician supervisor (s).
   - Two-way ambulance-hospital communications with tone alert.
   - Ambulances with mobile radio access to on-duty law enforcement officers.
   - Two-way communications among search and rescue personnel.
   - Two-way mobile radio communications with adjacent ambulance services.
2. For every acute care hospital:
   - Two-way communications with health care providers in the outlying communities it serves.
   - Capability to page on-call staff outside the hospital.
   - A code to notify other hospital staff of an emergency situation.
   - Capability of two-way, air-ground communications with all air services carrying patients to the hospital.
   - A back-up communications system or procedures for communications during power failures and disasters.
   - Communications equipment consolidated into one area, for constant monitoring.
   - Orientation and in-service training in use of communications equipment.
3. Certified emergency medical dispatchers capable of dispatching certified emergency personnel and directing bystander care at all times.
4. An up-to-date inventory of communications equipment used in the EMS system.
5. A local communications plan that addresses frequency compatibility between all emergency agencies, maintenance, and back-up procedures, and ensures compliance with current and planned FCC requirements.
6. New equipment procurements that fit the local and regional communications plans and are coordinated with the regional EMS office and the state.
7. One telephone number, well-advertised and toll free, preferably 911 Enhanced, to access fire, law enforcement, and emergency medical services. An alternate procedure should be arranged in case of 911 Enhanced system failure.

B STATE SYSTEM

Every **Level V Urban Center** should:

1. Have personnel who are familiar with all applicable EMS communications plans and how to obtain copies and/or additional information.
2. Ensure that proposed communications resources are compatible with existing and anticipated local, regional, and state communications plans and systems.

C BACK-UP AND RELIABILITY

Every **Level V Urban Center** should have:

1. A weekly test of the EMS communications system and a log which records the communications system's reliability.
2. Predetermined procedures for maintaining all emergency communications equipment.
3. A backup system for direct two-way communications between designated emergency care providers and the hospital to which they refer patients, and with their medical director (s).
4. A procedure for annual review and evaluation of the local communications plan.

4 PATIENT TRANSPORT/TRANSFER

A STANDARDS

Every **Level V Urban Center** should have:

1. Copies of the current *Alaska Trauma Triage, Transport and Transfer Guidelines* for all emergency medical services and facilities.
2. Local triage and transfer protocols.
3. An organized quality improvement program for all air medical and ground ambulance services.

B RESOURCES

I Ground Ambulances

Every **Level V Urban Center** should have:

1. A state-certified Advanced Life Support (ALS) service with full-time Mobile Intensive Care Paramedics providing 24-hour, 7 day-a-week coverage.
2. Ground ambulance services with a configuration and staffing to assure:
   - MICPs able to arrive at the scene within 8 minutes of a call for 90 percent of emergencies occurring within major populated areas.
   - First responders with Basic Life Support training and early defibrillation on the scene within 4 minutes of call for 90 percent of emergencies occurring within major population areas.

II Air Medical Services

Every **Level V Urban Center** should have:

1. At least one state-certified air medical service in the community.
2. At least one hospital with a helicopter landing area near the emergency department.
3. Within 15 minutes of each hospital, a landing area with lighting for fixed-wing aircraft.
4. For every acute care hospital:
   - One person on every shift designated as a Transfer Coordinator, responsible for knowing procedures and protocols of the receiving facility, and air schedules; and arranging transfer logistics.
   - For the person (s) assigned to coordinate transfers, a checklist of actions required to prepare any patient for transfer.
   - A directory of specific capabilities of those critical care facilities available to receive transferred patients.
   - Available at all times, prepared kits of basic equipment, basic life support, adult, pediatric and specialty kits as recommended in **Section 733**.
   - A means to support respiration, control airways and provide high levels of oxygen during transfer to another facility.
   - On every hospital-to-hospital transfer, a qualified attendant as prescribed by the physician in charge.
   - On every hospital-to-hospital transfer, a record of the patient's pre-hospital condition, as well as initial condition and treatment in hospital.
   - Specific procedures established with referring hospitals/health centers and receiving hospitals for preparation and transport of patients in each critical care area.

III Hospitals

Every **Level V Urban Center** should have:

1. An acute care hospital with:
   - A list of certified medevac services available to the community.
   - A directory of facilities with critical care capabilities available to receive transferred patients.
   - Specific procedures established between referring hospital and accepting hospital for preparation and transport of patients in each critical care category.
   - For the person (s) assigned to coordinate transfers, a checklist of actions required to prepare any patient for transfer.
   - For every hospital-to-hospital transfer, a record of patient's prehospital condition, as well as initial condition and treatment in hospital.
   - On all hospital-to-hospital transfers, a qualified medical attendant as prescribed by the physician in charge.
   - A means to provide ALS procedures during transfer to another facility.
   - A list of local and regional rehabilitation facilities.

- A system for allowing prehospital emergency medical services personnel to participate in preceptorships within the facility.

C PROTOCOLS

Every **Level V Urban Center** should have:

1. Protocols for a prehospital triage system for identifying major trauma and appropriate destinations for all injured patients.
2. Transport protocols based on patient need and hospital resources, including specialty needs (e.g., pediatrics, critical care, burns, spinal cord injury).
3. Guidelines for the rapid interfacility transfer of the major trauma patient to the appropriate tertiary trauma care center.
4. An on-call schedule of consultants utilized in each critical care area.

5 FACILITIES, EQUIPMENT AND SUPPLIES

A FACILITIES

I Hospitals

Every **Level V Urban Center** should have:

1. For those hospitals taking care of trauma care patients, verification by the **American College of Surgeons as either a Level III or a Level II Trauma Center**, and at least one hospital verified as a Level II Trauma Center.
2. For those hospitals taking care of pediatric trauma patients, verification by the **American College of Surgeons as a Level II Trauma Center with Pediatric Commitment**.
3. **At every hospital**:
   - Lab, blood gas, and X-ray technicians in-house, 24 hours-a-day.
   - Adult, child, and infant resuscitation equipment, and a plan for its maintenance.
   - An area equipped to receive a cardiac patient, with oxygen, monitor/defibrillator, oral suction, and a resuscitation crash cart; and a system to check equipment every day.
   - An emergency power source for care of critical patients in the event of power failure.
   - A system for returning equipment received with patients from outlying communities; and retrieving equipment sent with patients to other facilities.
   - Agreements with other hospitals in the community defining how resources should be shared during situations that overtax their facilities such as mass casualty disasters.
   - A security room or a procedure for keeping combative patients under observation, and to help ensure safety of staff and other patients.
   - A procedure and alarm system for protection of staff in the event of a behavioral emergency.
4. 24-hour, 7-day-a-week physician in-house emergency department coverage including:
   - Protocols for notification and response of physicians and trauma team before arrival of the patient.
5. For every **Acute Care Hospital**, the capabilities to:
   - Perform endotracheal intubation and cricothroidotomies.
   - Administer oxygen and monitor oxygen concentrations.
   - Support respiration artificially, both manually and mechanically through a respirator.
   - Perform pleural decompression by needle thoracentesis using flutter valves, and by chest tube insertions.
   - Provide Advanced Cardiac Life Support and Pediatric Advanced Life Support according to the standards of the American Heart Association or Advanced Pediatric Life Support.
   - Use an external cardiac pacemaker on an emergency basis and have patient transfer procedures to a cardiac center (intensive care and/or surgery).
   - Stop continuous bleeding with pressure and instruments.
   - Insert peripheral and central IVs on adult and pediatric patients.
   - Monitor fluid resuscitation, including Foley catheterization.
   - Immobilize a spinal injury until evaluation can be completed.
   - Perform complex x-ray examination.
   - Perform gastric lavage.

- Perform peritoneal dialysis.
- Modify a patient's core temperature.
- Splint extremities definitively.
- Debride wounds of the extremities.
- Care for complicated perinatal cases in those hospitals doing obstetrics when transfer is impractical or impossible, including emergency Cesarean section within one hour on a 24 hour basis, and fetal monitoring.

6. All hospitals with surgical capabilities and a general surgeon should have the capability to:
   - Perform emergency intracranial decompression with neurosurgical consultation.
   - Perform emergency abdominal, chest, and vascular surgery.
   - An inter-hospital trauma care committee to identify resources and facilities for best patient care.

II Specialty Care Centers

A – Trauma Care

Every **Level V Urban Center** should have:

1. At least one hospital capable of optimum treatment of multiple injuries, according to American College of Surgeons Level II Trauma Center Standards.
2. For all hospitals accepting patients from other hospitals for treatment of multiple injuries:
   - Surgical specialists using a multi-disciplinary approach to multiple injuries: neurosurgeons, thoracic surgeons, orthopedic surgeons, urologists, otolaryngologists, oral surgeons, vascular surgeons and general surgeons should be available for consultation or to respond to the hospital based on reports from the field.
   - Personnel for X-ray and laboratory in the building 24 hours a day.
   - An intensive care unit with staff trained in critical care.
   - Respiratory therapy personnel in the building 24 hours a day..
   - Sophisticated visual imaging diagnostic equipment.
   - Dialysis capabilities.
   - Extracorporeal circulation (ECC) for major heart and vascular injuries.
   - Capability for microsurgical technique for replantation.

B – Cardiac Emergency Care

Every **Level V Urban Center** should have:

1. At least one hospital with a cardiac care unit:
   - Under the direction of a board-eligible or board-certified Cardiologist.
   - With capability for direct monitoring of pulmonary artery pressure.
   - With capability of inserting a cardiac pacemaker on an emergency basis.
   - With capability for inserting and managing an intra-aortic balloon pump.
   - With availability of cardiac surgery within one hour.

C – Head, Neck and Spinal Injury Care

Every **Level V Urban Center** should have:

1. At least one identified hospital capable of intermediate care of head and spinal injuries.
2. At those hospitals accepting patients from other hospitals for intermediate care of head and spinal injuries:
   - 24-hour availability of a neurosurgeon and an orthopedist within thirty minutes.
   - For spinal injuries only: beds and equipment for the management of injured spine patients for up to one week, including surgical management with neurological consultation if indicated; nursing staff trained in care and transporting of patients to a spinal cord center; physical therapy; and specialized neuro-radiological capability.
   - Identified spinal cord injury centers to which they may transfer patients for continued rehabilitation.
   - Written guidelines for the treatment and transfer of head and spinal injury patients, for facilities sending in patients.

D – Thermal Injury Care

Every **Level V Urban Center** should have:

1. At least one hospital in the community capable of caring for moderate to major thermal injuries.
2. For those hospitals accepting patients with moderate to major thermal injuries:
   - A designated thermal care team including board-certified orthopedic surgeon and plastic surgeon; nurses with specialized thermal injury training; respiratory therapist; physical therapist with splinting experience; nutritionist; medical social worker; and prosthetics consultation.
   - Lab and X-ray personnel in building 24 hours a day.
   - A designated care area providing for the patient's isolation needs, with hydrotherapy in close proximity.
   - Equipment for a thermal controlled environment.
   - Criteria established by the burn team for identifying patients requiring transfer, and protocols for transferring them to a recognized thermal injury center for care and rehabilitation, based on American Burn Association standards and the thermal injury center to which they transfer.
   - Written protocols on the treatment of thermal injury patients, for facilities sending in patients.
   - Capability to perform manual muscular evaluations and electromyelograms.

E – Perinatal Emergency Care

Every **Level V Urban Center** should have:

1. At least one hospital with the capability for comprehensive perinatal care.
2. For those hospitals accepting patients for acute perinatal and neonatal care:
   - A designated neonatal care team, including a neonatalogist, nurses with special neonatal training, respiratory therapist, nutritionist, medical social worker, and biomedical engineer and a pediatric surgeon.
   - Diagnostic lab services to assess fetal and maternal well-being, including diagnostic ultrasound, available 24 hours a day.
   - 24-hour capability to provide oxygen therapy for small and ill infants, and the ability to monitor inspired oxygen concentration and arterial blood gases.
   - Capability to continuously monitor vital functions such as heart rate, blood pressure, respiration and temperature.
   - Capability to use assisted ventilation.
   - Criteria established by the neonatal care team to identify which infants can be cared for in their facility, and which require transfer to higher level neonatal center.
   - For referring hospitals, information on their capabilities and written protocols on stabilization and transfer of infants to the most appropriate neonatal care facility.

F – Poisoning Care

Every **Level V Urban Center** should have:

- a system for advertising the national toll-free poison center number.
- a system for obtaining data about the frequency and types of poisoning within the community.
- a plan for reducing the number of accidental and intentional poisonings.

G – Behavioral Emergency Care

Every **Level V Urban Center** should have:

1. An identified facility to which patients with severe behavioral problems are transferred and protocols for their transfer.
2. Transfer agreements between hospitals and the facility receiving patients with severe behavioral problems, which specify the agency which will provide transport personnel.

H – Pediatric Emergency Care

Every **Level V Urban Center** should have:

1. For those hospitals accepting pediatric trauma patients:
   - A surgeon and medical specialists appropriately credentialled to provide pediatric trauma care available and on call at all times.
   - Special equipment necessary for the resuscitation, surgery, and postoperative care of infants and children. This must be immediately available to every

hospital unit providing care for injured children.
- A designated and identifiable emergency department area with appropriately trained staff, and pediatric equipment. This area must allow free movement of personnel and equipment without unnecessarily exposing the child to potential additional stress.
- Comprehensive diagnostic and laboratory facilities, including micro-sampling capability and immediate computed tomographic scan availability 24 hours a day.
- Intensive care with pediatric capabilities provided by appropriately trained surgical and pediatric specialists, with appropriate equipment and other ancillary personnel.
- A pediatric floor or unit staffed by trained and appropriately credentialled professionals. Facilities that use rotating or floating healthcare professionals must document that those assigned to pediatric coverage maintain ongoing education and training in pediatric care.

I – Hyperbaric Emergency Care

Every **Level V Urban Center** should have:

1. Availability of a hyperbaric chamber within one hour.
2. Physician and ancillary personnel with specialized training in hyperbaric medicine.

J – Rehabilitation Care

Every **Level V Urban Center** should have:

1. At least one hospital with the capability for comprehensive rehabilitation services for moderate to major disabling conditions.
2. Identified rehabilitation referral centers to which patients may be transferred for continued rehabilitation.
3. For those hospitals accepting patients with moderate to major rehabilitation patients:
   - Rehabilitation service staffed by personnel trained in rehabilitation care and equipped properly for acute care of the critically injured patient.
   - Full in-house service or transfer agreement to a rehabilitation service for long-term care.
   - Provide provision of recreational and education services during hospitalization for those patients able to use them.
   - Provide evaluation of the needs and support capabilities of the patient's family, as well as of others providing help for and cooperative planning with the family for the patient's discharge from the hospital.
   - Provide documentation of need for and availability and accessibility of community resources to assist in meeting the patient's physical, psychosocial, educational, and vocational needs after discharge from the hospital.
   - Provide evaluation of each patient's status performed at appropriate intervals after discharge from the hospital.
   - Provide provision for readmission for medical or surgical treatment for late problems or for rehabilitation and reconstruction.

B EQUIPMENT AND SUPPLIES

Every **Level V Urban Center** should have:

1. Trauma kits readily available for first responders, equipped as recommended in **Section 731**.
2. One extrication kit for first responders, equipped as recommended in **Section 731**.
3. Equipment and supplies appropriate for training level of EMS providers.
4. Equipment and supplies for emergency care for both pediatric and adult patients as recommended in **Section 732**.
5. Predetermined procedures for maintaining equipment.

6 PUBLIC SAFETY

A PUBLIC SAFETY AGENCIES

Every **Level V Urban Center** should have:

1. Coordination between public safety agencies with mutual aid agreements.

B ENVIRONMENTAL RESPONSE

Every **Level V Urban Center** should have:

1. A community plan for hazardous materials response which covers the topics in *Managing Hazardous Materials Incidents,*

Volume I-II (available from the State EMS Office).
2. Personnel trained in the recognition of, and immediate response to hazardous materials emergencies. Core personnel should be trained to the hazmat specialist level.
3. A procedure for notifying appropriate agencies if a hazardous materials release occurs.
4. A procedure for activating local, regional, or state hazardous materials response teams in the event of a hazardous materials release, including teams trained in decontamination, treatment, and transport of seriously contaminated patients.

7 ACCESSIBILITY TO CARE

A FINANCING SERVICES

Every **Level V Urban Center** should have:

1. A plan for monitoring and documenting emergency care costs and for coordinating billing attempts with appropriate local or regional agencies.
2. A plan to assure that services are financed so the consumer's ability to pay or economic status does not interfere with delivery of services at the time of need and does not affect the quality of health services provided.
3. A data collection system that documents trauma system provider costs.

B EQUAL CARE OPPORTUNITY

Every **Level V Urban Center** should:

1. Ensure that all patients are provided emergency care and transportation without regard to race, creed, color, sex, national origin, disability, or ability to pay.

C SERVICE AVAILABILITY

Every **Level V Urban Center** should have:

1. All residences with telephone access to an organized ambulance service in their community at all times.
2. 911 Enhanced telephone access available.
3. An organized public access automated external defibrillator program.

8 COORDINATED RECORD KEEPING

A LOCAL RECORD KEEPING

Every **Level V Urban Center** should:

1. Maintain training, personnel, and medical records as required by applicable state and federal laws.
2. Use ambulance run report forms which meet minimum state and local data requirements and provide an effective mechanism for local medical audit. There is a state minimum data set for run reports.
3. Have, for every hospital, a coordinated record system which incorporates:
   - The emergency department log,
   - Ambulance records,
   - Other hospital records,
   - Trauma registry, and
   - A system allowing ambulances to pass on prehospital reports to clinics and hospitals.
4. Ensure that patient records covering the prehospital, emergency department, in-hospital and transfer phases of patient care are coordinated, enabling easy follow-up of a patient's condition and treatment.
5. Have a computerized information system for all run reports.
6. Have hospitals that offer an easily accessible discharge diagnosis data system, compatible with other hospitals in the state.
7. Ensure that emergency medical services provide summary data (the *Annual EMS Response Survey*) to subarea, regional, and state EMS agencies.
8. Ensure that EMS agencies provide appropriate data to local hospitals, regional EMS agencies, and State Department of Health and Social Services.

B REGIONAL AND STATE COORDINATION

Every **Level V Urban Center** should:

1. Ensure that Trauma Registry data and other patient care information be collected at every acute care hospital and rehabilitation facility.
2. Ensure that a copy of the original prehospital run report information be

provided to every acute care hospital receiving transported patients.

9 PUBLIC INFORMATION AND EDUCATION

A ACCESS

Every **Level V Urban Center** should have:

1. A public education program to ensure that residents and visitors are familiar with the emergency care and injury prevention resources available to them, including 911 and accessing the local EMS system.

B EMERGENCY RESPONSE

Every **Level V Urban Center** should have:

1. At least one certified CPR instructor per 500 people.
2. At least one First Aid instructor per 500 people.
3. First Aid and CPR classes for all school students.
4. First Aid and CPR classes for community residents annually.
5. Access to training aids necessary for CPR and First Aid training.
6. At least 25 percent of all residents trained in CPR with information for trauma and hypothermic victims.
7. Posted procedures for accessing the local EMS system available to all school personnel for the efficient handling of injuries and other emergencies, including plans for the transport of critically injured or ill children to an appropriate facility.
8. Information available to public safety and local government personnel as to who to contact in case of a disaster.
9. A coordinator to schedule and oversee CPR and First Aid training in the community. This person should coordinate with the Regional EMS Office.
10. An active program for teaching ETT courses in high schools.

C CONSUMER PARTICIPATION

Every **Level V Urban Center** should:

1. Encourage consumer participation in EMS and trauma care planning and policy development.
2. Identify consumers with special interest in EMS and encourage their participation in appropriate events.
3. Maintain a library of injury prevention resources ..
4. Have a local EMS or health council with consumer representation with EMS and trauma experience.
5. Encourage participation in EMS and trauma care planning and policy development by business and government leaders.

10 EVALUATION

A LOCAL REVIEW

Every **Level V Urban Center** should:

1. Establish a mechanism for annual evaluation of the overall EMS program in the community, including the trauma care system, in coordination with existing state and regional EMS evaluation procedures.
2. Have a physician medical director review all emergency response runs to determine whether the care and transfer provided were appropriate and in accordance with local, regional, and state guidelines.
3. Establish, for every hospital, a plan to meet the Joint Commission on Accreditation of Healthcare Organizations hospital standards, and the American College of Surgeons, Committee on Trauma standards for trauma centers.
4. For each state-certified ambulance service, have a continuous quality improvement program to evaluate trauma care and all other EMS patient care, including review of trauma registry reports.
5. For each acute care hospital, have a continuous quality improvement program to evaluate trauma care and all other EMS patient care, including review of trauma registry reports.

B REGIONAL REVIEW

Every **Level V Urban Center** should:

1. Coordinate a community EMS review using the recommendations contained in *Alaska EMS Goals* every three years.

C STATE REVIEW

Every **Level V Urban Center** should:

1. Participate in the state patient care review process.

11 DISASTER RESPONSE

A COORDINATION

Every **Level V Urban Center** should:

3. Maintain an integrated all-hazard plan.
4. Be included in a state/regional/subarea disaster plan. The plan should identify the most likely disaster threats, address these threats with action plans, define the roles and responsibilities of key public health and safety officials in the event of a disaster, and explain how regional and state disaster response resources are accessed.
5. Have disaster plans of local entities (airport, hospital, industries, military bases) incorporated into the community disaster plan.
6. Have memoranda of agreement (MOAs) and memoranda of understanding (MOUs) with those agencies and providers that would be relied upon in emergency situations over-taxing routine procedures and resources. Agreements should include documentation of cost to allow reimbursement of expenses by the community and/or state.
7. Have a level A personal protective equipment level capability/response team which is deployable to other communities
8. Have a list of resources and emergency contacts
9. Know the diseases reportable to the state and the reporting mechanisms.
10. Have local plans which are integrated with state plans which include procedures for notifying authorities of threatened, actual or known bioterrorist events, minimizing exposures, personal safety, including recommendations on personal protective equipment, and decontamination.
11. Have contacts for information on state plans
12. Have an account on the ADES First Class system which is checked at least once a day and more frequently in times of emergency.

B TRANSPORTATION

Every **Level V Urban Center** should have:

1. A plan for ensuring that patients can be evacuated from the community in a disaster
2. A system for retrieving equipment used in transports.
3. Identification of a secondary point for evacuation during a disaster.
4. A plan for staging, triage, and transport (including air medical) of mu ltiple casualties.

C PERSONNEL

Every **Level V Urban Center** should have:

1. A full-time Disaster Preparedness Coordinator.
2. All prehospital personnel trained in the Incident Command System and familiar with the initial response to a disaster, and the ability to access additional personnel, equipment, supplies, and transportation resources.
3. EMS personnel trained in the START (Simple Triage and Rapid Treatment) triage system.
4. Adequate community personnel trained and certified as Red Cross Shelter Managers.

D TRAINING

Every **Level V Urban Center** should have:

1. The Disaster Preparedness Coordinator complete the following FEMA Home Study Courses: *HS-1 Emergency Program Manager, HS-2 Emergency Management, USA; HS-5 Hazardous Materials: A Citizen's Orientation;* and *Professional Development Curriculum.*
2. Annual disaster exercises that include all the individuals and agencies most involved in decision making for and the response to a catastrophic event. The exercise should include the activation of the emergency operations center (EOC) and the EOC staff, and should be coordinated with regional EMS agencies.
3. All Community Shelter Managers complete a Shelter Systems Officer Course approved by the American Red Cross.

F FACILITIES AND EQUIPMENT

Every **Level V Urban Center** should:

1. Have sufficient equipment to initiate a rapid and safe disaster response.

2. Have a plan for accessing additional equipment and supplies, through mutual aid agreements or direct requests to regional and state disaster agencies.
3. Have an established plan for EMS equipment resupply and return.
4. Evaluate and designate local buildings (schools, churches, community centers) as resources in the disaster plan for sheltering.
5. Identify potential triage, treatment, and transfer sites in disaster facilities.
6. Have pre-stocked disaster supplies available in case of mass casualty disasters, as recommended in **Section 737**.

12 MUTUAL AID AGREEMENTS

A ESTABLISHMENT AND MAINTAINANCE

Every **Level V Urban Center** should:

1. Establish and maintain written mutual aid agreements between local emergency response agencies (e.g., EMS, fire, law enforcement, National Guard, Coast Guard, other military).
2. Have a state-certified emergency medical service with written mutual aid agreements with adjacent services for back-up support, patient transfer from service to service, equipment compatibility and retrieval.
3. Have a highway first responder system with written mutual aid agreements between the emergency medical service and highway first responders who are not part of your emergency medical service.
4. Have, for air medical evacuation more than 60 minutes from a hospital, written mutual aid agreements with certified air medical services or for helicopter or fixed-wing evacuation services. These would include:
   - Person (s) designated to make requests for service.
   - Procedures for accessing and requesting service.
   - Procedures for rendezvous.
   - Procedures for reimbursement of aircraft costs.

13 MEDICAL DIRECTION

A EMS MEDICAL DIRECTORS

Every **Level V Urban Center** should have:

1. For every emergency service:
   - A physician to serve as medical director for certified prehospital emergency care personnel, who agree to fulfill the responsibilities of a physician medical director as outlined in the state EMS regulations.
   - Capability for receiving direct physician supervision by phone or radio.
   - Emergency medical records reviewed by the Physician Medical Director or designee at least monthly.
   - Written guidelines for prehospital patient care recommended by the medical director, in all emergency care areas.
   - A system for on-line medical direction of prehospital/interfacility providers. The system should include on-line physician advisor or designees qualifications and responsibilities and pre-established policies, procedures, and protocols for training, triage, treatment, transport, and operations.
   - Identification of a mix of health care professionals designated to provide patient care services under medical direction for both the off-line and on-line medical direction systems.
   - Strategies identified to strengthen and improve the current on-line and off-line medical direction systems.

B REGIONAL/STATE EMS SYSTEM MEDICAL DIRECTORS

Every **Level V Urban Center** should:

1. Know how to contact the State/Regional EMS Medical Directors for additional information on medical direction.

14 INJURY PREVENTION

A PROGRAM DEVELOPMENT

Every **Level V Urban Center** should have:

1. A copy of the State Injury Prevention Plan and access to state injury prevention resources.
2. A community-based or regional injury prevention plan that includes:

- an assessment of community or regional injuries;
- goals and objectives for improving injury prevention; and
- strategies for injury prevention programs and activities.

The **assessment of community or regional injuries** is provided by the state Injury Surveillance and Prevention Program..
The **goals and objectives** should include education, public policy and environmental changes to promote injury prevention based on major causes of injuries within the community or region.
Strategies should include activities of proven effectiveness that are culturally and geographically relevant to build public awareness about injuries, programs to increase injury prevention behaviors, and provide injury prevention and survival education for all school age children.

3. Establishment of ordinances and policies that decrease the risk of injuries to community residents and visitors and make appropriate environmental changes to reduce injury events.
4. Active injury prevention programs coordinated with regional and state agencies to educate the public, change the environment, or develop ordinances to enhance safety. Examples include: boating and water safety, survival, home safety, fire prevention, helmet use, firearm safety, seat belts, and infant and child car and booster seats.

B TRAINING

Every **Level V Urban Center** should:

1. Have local health, social services, education, and public safety personnel who are trained to provide injury prevention information.
2. Know how to access resources from the state, region, and national programs for injury prevention activities.

SECTION 680
OTHER AREAS

OVERVIEW

This section contains the specific EMS recommendations for **Other Areas** described in **Section 410**. These other areas include:

- **681 Very Small Communities**
- **682 Highways**
- **683 Marine Highways**
- **684 At-Risk Sites**

The recommendations are organized in the fourteen-component framework described in **Section 430**. Due to the small size of these areas, not all the components of the framework are used for the recommendations.

Section 830 for a listing of **Very Small Communities** and **High-Risk Work Sites**.

681 Very Small Communities

681.1 Recommendations

PERSONNEL

Every **Very Small Community** should have:

1. At least one person who has received Emergency Trauma Technician training and who knows how to use the First Responder Trauma Kit (see **Section 731**). Emergency Medical Technician training is highly recommended.
2. One person designated to communicate with the emergency care provider and/or emergency transportation service.
3. Designated regional injury prevention specialist.

COMMUNICATIONS

A LOCAL/REGIONAL SYSTEMS

Every **Very Small Community** should have:

1. A means for first responders to contact the designated emergency care receiving facility.
2. A means for first responders to contact the national poison control number.
3. A means for two-way communications among first responders.
4. A means for two-way communications between first responders on the highway and the ambulance service covering their area if applicable.
5. Emergency care providers trained in relay of medical communications as appropriate to their local resources.
6. Posted communications procedures.

PATIENT TRANSPORT/TRANSFER

A STANDARDS

Every **Very Small Community** should have:

1. Copies of the current *Alaska Trauma Triage, Transport and Transfer Guidelines* for all emergency care providers.

B RESOURCES

Every **Very Small Community** should have:

1. Prior arrangements with a specific agency or transport service for emergency patient evacuation when needed.
2. A posted set of instructions for contacting the emergency transport service based on the *Alaska Trauma Triage, Transport and Transfer Guidelines*.
3. Specific directions for ground preparations for aircraft landing, if required for medevac.

FACILITIES, EQUIPMENT ANDSUPPLIES

B EQUIPMENT AND SUPPLIES

Every **Very Small Community** should have:

1. Stored in a designated area, a set of Basic Life Support equipment, as recommended by the Regional EMS Council.
2. Stored along with Basic Life Support equipment, a standard reference book on treating emergencies in the wilderness, as recommended by the Regional EMS Council.
3. Trauma kits readily available for first responders, equipped as recommended in **Section 731**.
4. Predetermined procedures for maintaining equipment.

PUBLIC SAFETY

A PUBLIC SAFETY AGENCIES

Every **Very Small Community** should have:

1. A means to contact the nearest State Trooper or Village Public Safety Officer.

B ENVIRONMENTAL RESPONSE

Every **Very Small Community** should:

1. Know who to contact to report a hazardous materials spill.

ACCESSIBILITY TO CARE

A FINANCING SERVICES

B EQUAL CARE OPPORTUNITY

Every **Very Small Community** should:

1. Ensure that all patients in need of EMS are provided emergency care and transportation without regard to race, creed, color, sex, national origin or ability to pay.

C SERVICE AVAILABILITY

Every **Very Small Community** should:

1. Have access via telephone or radio to trained and equipped emergency medical responders within a reasonable time at all times.

COORDINATED RECORD KEEPING

A LOCAL RECORD KEEPING

Every **Very Small Community** should:

1. Maintain training, personnel, and medical records as required by applicable state and federal laws.

B REGIONAL AND STATE COORDINATION

Every **Very Small Community** should:

1. Have a system for providing summary data to regional and state EMS agencies.
2. Use a state-approved patient care form for emergency medical services.

13 MEDICAL DIRECTION

A EMS MEDICAL DIRECTORS

Every **Very Small Community** should have:

1. Prior arrangements with a designated emergency care provider (physician, physician assistant, nurse, health aide, etc.), who can give instructions by phone or radio if needed. Instructions for contacting the provider and alternate providers should be posted.

INJURY PREVENTION

A PROGRAM DEVELOPMENT

Every **Very Small Community** should:

1. Have a copy of the state injury prevention plan.
2. Have access to state injury prevention resources.

B TRAINING

Every **Very Small Community** should have:

1. Access to travel to EMS symposia.
2. Access to injury prevention training, materials, and resources.

682 HIGHWAYS

682.1 Recommendations

PERSONNEL

B PROVIDERS

Every **Highway** should have:

1. A designated first responder trained to at least ETT level, available to respond to an emergency at any point along the highway system, within 15 minutes from call to dispatch of notification, for at least 75 percent of calls. First responders should be equipped with trauma kits as recommended in **Section 731**.
2. EMS coverage to any area within 30 minutes from receipt of call.
3. A designated regional injury prevention specialist.

COMMUNICATIONS

A LOCAL/REGIONAL SYSTEMS

Every **Highway** should have:

1. A means for first responders or ambulance service personnel to contact the designated emergency care receiving facility to which they refer patients.
2. A means for first responders or ambulance service personnel to contact the national poison control number.
3. A means for two-way communications among first responder or ambulance service personnel.
4. A means for two-way communications between first responders on the highway and the ambulance covering their area if applicable.
5. A means to dispatch first responders or ambulance service personnel at all times.
6. A means for two-way communications between emergency responders.
    - A continuous communication link among designated persons along the highway to monitor emergency telephone and CB calls, 24 hours a day.

- Written information on which agency to call for specific types of emergency assistance requested, and how agencies may be contacted.
- Emergency call boxes or other emergency telephone access every ten miles.

PATIENT TRANSPORT/TRANSFER

B RESOURCES

Every **Highway** should have:

1. A state-certified ambulance service, with standards equivalent to at least a Level II Community, located at least every 100 miles, and certified first responder services at least every 50 miles.
2. Access within a reasonable period of time, to a state-certified air medical service for transport when appropriate.

C PROTOCOLS

Every **Highway** should have:

1. A plan for transporting patients based on the degree of injury, available equipment, and the level of personnel available to accompany a particular type of transport (see *Alaska Trauma Triage, Transport and Transfer Guidelines*).
2. Established procedures for emergency air transport of adult and pediatric patients as delineated in the *Alaska Medevac Manual*.
3. A system for retrieving equipment transported with the patient.

PUBLIC INFORMATION AND EDUCATION

A ACCESS

Every **Highway** should have:

1. Available to all highway travelers, ready, up-to-date, easy-to-read information on:
- The nearest emergency services,
- How to access emergency services,
- Current limitations of the emergency services,
- How to be prepared for an emergency,
- What to do in an emergency, and
- Basic survival skills in cold weather.

MUTUAL AID AGREEMENTS

A ESTABLISHMENT AND MAINTENANCE

Every **Highway** should:

1. Establish and maintain written mutual aid agreements with adjacent and neighboring communities.

INJURY PREVENTION

A PROGRAM DEVELOPMENT

Every **Highway** should:

1. Be included in the state highway safety plan.

683 Marine Highway

683.1 Recommendations

PERSONNEL

A ADMINISTRATION

The **Marine Highway System** should have:

1. A designated person to coordinate EMS and injury prevention activities.
2. Input into a regional/subarea EMS plan.
3. A plan for accessing Critical Incident Stress Management (CISM) for providers as indicated.
4. A physician medical director who assumes the responsibilities of a medical director outlined in EMS regulations.

B PROVIDERS

The **Marine Highway System** should have:

1. A designated safety officer on board each ship with at least ETT training and who:
- Is available to provide emergency care at all times,
- Is trained in the use of communications as appropriate for local resources, and
- Has access to physician medical consultation at all times.

TRAINING

A STANDARDS

The **Marine Highway System** should have:

1. Basic training programs for ETTs and EMTs including pediatric and trauma care.
2. All emergency medical services personnel trained to applicable state or national standards regarding hazardous materials, bloodborne pathogens, incident command system, emergency vehicle operations, and confined space.
3. For all emergency responders, an ongoing training and continuing education program adequate to meet the recertification needs of all providers.

COMMUNICATIONS

A LOCAL/REGIONAL SYSTEMS

The **Marine Highway System** should have:

1. A system for direct two-way communications between emergency care providers and hospitals to which they refer patients, and with the physician in the nearest emergency department.
2. A means for contacting the national poison control number.
3. A current inventory of communications equipment.
4. A means to notify on-board emergency medical services personnel 24 hours a day.

C BACKUP AND RELIABILITY

The **Marine Highway System** should have:

1. A back-up system for direct two-way communications between emergency care providers and the hospitals to which they refer patients, and with physicians in the nearest emergency department.

PATIENT TRANSPORT/TRANSFER

A STANDARDS

The **Marine Highway System** should have:

1. Access to a regional or sub-regional state certified ground medical service.
2. Copies of the current *Alaska Trauma, Triage, Transport and Transfer Guidelines* for all ships.

B RESOURCES

The **Marine Highway System** should have:

1. A directory of emergency transportation resources available and directions for their access.

C PROTOCOLS

The **Marine Highway System** should have:

1. A plan for transferring patients based on the degree of injury, available equipment, and the level of personnel legally authorized for accompanying a particular type of transport (see *Alaska Trauma, Triage, Transport and Transfer Guidelines*).
2. Established procedures for emergency air transport of adult and pediatric patients.
3. A system for retrieving equipment transferred with the patient.
4. Posted procedures for patient transport.

FACILITIES, EQUIPMENT AND SUPPLIES

A FACILITIES

The **Marine Highway System** should have:

1. A designated room on the vessel for providing basic medical care to injured or ill patients until emergency medical transportation can be arranged to an appropriate medical facility.

B EQUIPMENT AND SUPPLIES

The **Marine Highway System** should have:

1. Emergency care equipment and supplies, as recommended in **Section 731 – First Responders**.
2. An automated external defibrillator on each vessel.
3. Equipment and supplies appropriate for training level of EMS providers.
4. Equipment and supplies for emergency care for both pediatrics and adult patients as recommended in **Section 734 – Clinics**.
5. Pre-determined procedures for maintaining equipment and restocking supplies

PUBLIC SAFETY

A PUBLIC SAFETY AGENCIES

The **Marine Highway System** should have:

1. A means to contact the nearest Alaska State Trooper or other appropriate law enforcement agency.

B ENVIRONMENTAL RESPONSE

The **Marine Highway System** should have:

1. Personnel trained in the recognition of, and immediate protection of people during, a hazardous materials release.
2. A plan for activating local, regional, or state hazardous materials response teams in the event of a hazardous materials release.

ACCESSIBILITY TO CARE

A FINANCING SERVICES

B EQUAL CARE OPPORTUNITY

The **Marine Highway System** should:

1. Ensure that all patients in need of EMS are provided with emergency care and transportation without regard to race, creed, color, sex, national origin, disability or ability to pay.

COORDINATED RECORD KEEPING

A LOCAL RECORD KEEPING

The **Marine Highway System** should:

1. Maintain training, personnel and medical records as required by applicable state and federal laws.

B REGIONAL AND STATE COORDINATION

The **Marine Highway System** should:

1. Have a system for providing summary data to the regional and state EMS agencies.
2. Use a state-approved patient care form for emergency medical services.

PUBLIC INFORMATION AND EDUCATION

A ACCESS

The **Marine Highway System** should have:

1. A public education program to ensure that visitors are familiar with the emergency care resources available to them, and how they may be accessed.

EVALUATION

B QUALITY IMPROVEMENT

The **Marine Highway System** should:

1. Have a system for correcting deficiencies in individual or agency performance based on the review of emergency runs.

DISASTER RESPONSE

A COORDINATION

The **Marine Highway System** should:

1. Have a shipboard fire fighting plan.
2. Have a shipboard mass casualty incident plan.

B TRANSPORTATION

The **Marine Highway System** should have:

1. A plan for ensuring that ill or injured patients can be triaged, treated/stabilized and evacuated from the vessel in a disaster.
2. A system for retrieving equipment used in transports.

C PERSONNEL

The **Marine Highway System** should have:

1. Personnel with training in the Incident Command System, familiarity about the initial response to a disaster, and the ability to access additional personnel, equipment, supplies, and transportation resources.

D TRAINING

The **Marine Highway System** should have:

1. Annual disaster exercises that include those individuals and agencies most likely to be involved in disaster response. The exercise should be coordinated with regional EMS agencies.

E FACILITIES AND EQUIPMENT

The **Marine Highway System** should have:

1. Sufficient equipment to initiate a rapid and safe disaster response.
2. A plan for assessing additional equipment and supplies, through mutual aid agreements of direct request to regional and state disaster agencies.
3. An established plan for equipment resupply and return to potential disaster threats.

MEDICAL DIRECTION

A EMS MEDICAL DIRECTORS

The **Marine Highway System** should have:

1. A physician identified to act as the medical director for prehospital emergency care personnel, who agrees to fulfill the responsibilities of a physician medical director as outlined in the EMS regulations.
2. Access to medical consultations for emergency care providers at all times.

INJURY PREVENTION

B TRAINING

The **Marine Highway** should have:

1. Orientation of all new employees to safety practices and activation of EMS system.
2. On-going safety education for employees.

684 At-Risk Sites

684.1 Schools

684.11 Recommendations

PERSONNEL

B PROVIDERS

Every **School** should have:

1. At least two people, trained to the ETT level or above, responsible for first aid and necessary referral for sick or injured children.
2. A designated safety coordinator.
3. An emergency response plan developed in accordance with state statute with input from the local emergency medical services agency. (See AS 14.33.100. Required school crisis response planning.)

TRAINING

A STANDARDS

Every **School** should have:

1. For all teachers, an annual orientation to current emergency procedures.

PATIENT TRANSPORT/TRANSFER

C PROTOCOLS

Every **School** should have:

1. Posted procedures, known to all school personnel, for the efficient handling of injuries and emergencies, including plans for the transport of critically injured or ill children to an appropriate facility, by appropriately trained and equipped EMS personnel.
2. Procedures for handling of medical and dental emergencies in accordance with policies reviewed and approved by the official health agency serving the community.

PUBLIC EDUCATION AND INFORMATION

A ACCESS

Every **School** should:

1. Have appropriate access to emergency medical services included in their curriculum.
2. Know how to access the national poison control number.

B EMERGENCY RESPONSE

Every **School** should have:

1. First Aid and CPR included in their curriculum.

INJURY PREVENTION

A PROGRAM DEVELOPMENT

Every **School** should have:

1. A safety plan that includes playground and sport activities and events.
2. Injury prevention, safety activities, and survival education, included in their curricula.
3. For those students engaged in physical education and competitive athletic programs:

- An evaluation of each individual's appropriate level of participation.
- A plan for graduated conditioning.
- Training in the prevention of injuries relevant to each type of activity.
- Appropriate safety equipment.

684.2 High-Risk Work Sites

The Alaska Department of Labor, Division of Occupational Safety and Health (OSHA) Standards has established minimum standards which all industries and occupational groups should meet. See *Article 5-Medical and First Aid, Subchapter of the General Safety Code*. Certain occupational groups – construction, logging, pulp, paper and paperboard mills, sawmills, and petroleum – are required to meet additional minimal OSHA standards for first aid.

684.21 Remote Sites

PERSONNEL

B PROVIDERS

Every **Remote High-Risk Work Site** should have:

1. One designated person, preferably trained to at least the EMT level, to coordinate planning and preparation for emergency response. This person should be responsible for:
   - Liaison with community-based health services;
   - Communicating with physician advisor;
   - Arranging for initial and refresher training of emergency response personnel;
   - Coordinating periodic practical exercises specific to the industry;
   - Inventorying, maintaining, ordering EMS equipment and supplies; and taking charge of medevacs.
2. At least two workers trained to the ETT level or above.
3. One emergency medical provider for every 25 employees, but at least one at each isolated work area (a work area is the smaller work unit within the work site which may be physically isolated or cut off from the rest of the workers), with the following minimum training:
   - Basic Emergency Trauma Technician training,
   - Training in medevac procedures, and
   - Training in handling medical emergencies specific to industry.
4. Designated non-medical support personnel with technical expertise specific to the hazards presented by the industry, who can be available in an emergency.
5. A designated person in charge of on-site safety.
6. On every medevac from industrial site to medical facility utilizing local personnel, and attendant with a minimum of ETT skill level.

TRAINING

A STANDARDS

Every **Remote High-Risk Work Site** should have:

1. All emergency care providers trained to applicable state or national standards including hazardous materials, bloodborne pathogens, Incident Command System, emergency vehicle operation and confined space.
2. For all emergency care providers, an ongoing training and continuing education program adequate to meet the recertification needs of all providers and Refresher training for emergency care providers and oriented to industry-specific hazards.
3. Company-sponsored practical exercises held in actual work areas at least twice a year, to practice response procedures for typical emergencies.

COMMUNICATIONS

A LOCAL/REGIONAL SYSTEMS

Every **Remote High-Risk Work Site** should have:

1. A means for two-way communications between emergency care providers and the ambulance service covering their area if applicable.
2. A means for contacting the national poison control number.
3. Two-way direct communications capability, with a physician (preferably), or an agency that can provide emergency medical assistance at all times.
4. Two-way direct communications capability between each isolated work area and the main station.

5. Posted procedures at the communications center on how to access the emergency response agency.

PATIENT TRANSFER/TRANSPORT

A STANDARDS

Every **Remote High-Risk Work Site** should have:

1. Access to a state-certified air medical service.
2. A copy of the current Alaska Trauma Triage, Transport and Transfer Guidelines.

B RESOURCES

Every **Remote High-Risk Work Site** should have:

1. For isolated sites with road access to an emergency service, a designated vehicle for emergency transport of mo re than one hour from an ambulance service.
2. At the site's communication center, a posted list of air medical services available, their capabilities and resources, and how to contact them.

FACILITIES, EQUIPMENT AND SUPPLIES

A FACILITIES

Every **Remote High-Risk Work Site** should have:

1. For worksites employing more than 50 people, a first aid room equipped as recommended in **Section 738-Remote Sites**.
2. An automated external defibrillator.

B EQUIPMENT AND SUPPLIES

Every **Remote High-Risk Work Site** should have:

1. Readily available to each isolated work area and at the main station, a trauma kit or its equivalent equipped as recommended in **Section 738-Remote Sites**.

COORDINATED RECORD KEEPING

A LOCAL RECORD KEEPING

Every **Remote High-Risk Work Site** should:

1. Maintain training, personnel, and medical records as required by applicable state and federal laws.

B REGIONAL AND STATE COORDINATION

Every **Remote High-Risk Work Site** should:

1. Have a system to provide summary data to regional and state EMS agencies.
2. Use a state approved patient care form for emergency medical services.

MEDICAL DIRECTION

A EMS MEDICAL DIRECTORS

Every **Remote High-Risk Work Site** should have:

1. A physician advisor, to be responsible for:
   - Determining the appropriate level of emergency medical skills and training required for the site situation; and
   - Recommending specific emergency procedures.
2. A plan for contacting a physician in the event of a medical emergency.

INJURY PREVENTION

A PROGRAM DEVELOPMENT

Every **Remote High-Risk Work Site** should have:

1. A safety plan.

B TRAINING

Every **Remote High-Risk Work Site** should have:

1. Orientation of all new employees to safety practices and activation of the EMS system.
2. On-going training for the safety officer in injury issues and work-site hazards, and the control of these.

684.22 Nearby Sites

PERSONNEL

B PROVIDERS

Every **Nearby High-Risk Work Site** should have:

1. One emergency medical provider for every fifty employees, but at least two emergency care providers. Minimum training should include:
   - Emergency Trauma Technician (ETT) training.
   - Training in first response for medical emergencies specific to the industry including the use of automated external defibrillators.

TRAINING

A STANDARDS

Every **Nearby High-Risk Work Site** should have:

1. For industries employing over fifty people, an ongoing training and continuing education program for all emergency care providers adequate to meet the recertification needs of all providers and refresher training for emergency care providers and oriented to industry-specific hazards.

COMMUNICATIONS

A LOCAL/REGIONAL SYSTEMS

Every **Nearby High-Risk Work Site** should have:

1. Direct communication with the ambulance service.
2. Access to the national poison control number.

PATIENT TRANSFER/TRANSPORT

A STANDARDS

Every **Nearby High-Risk Work Site** should have:

1. Access to a state-certified air medical service.
2. A copy of the current *Alaska Trauma Triage, Transport and Transfer Guidelines*.

B RESOURCES

Every **Nearby High-Risk Work Site** should have:

1. For isolated sites with road access to an emergency service, a designated vehicle for emergency transport of more than one hour from an ambulance service.
2. At the site's communication center, a posted list of air services available, their capabilities and resources, and how to contact them.

DISASTER RESPONSE

A COORDINATION

Every **Nearby High-Risk Work Site** should have:

1. For industries employing more than fifty people, a disaster plan linked with community resources and integrated into the community disaster plan.

D TRAINING

Every **Nearby High-Risk Work Site** should have:

1. Annual disaster drills.

INJURY PREVENTION

A PROGRAM DEVELOPMENT

Every **Nearby High-Risk Work** Site should have:

1. A safety plan.

B TRAINING

Every **Nearby High-Risk Work Site** should have:

1. Orientation of all new employees to safety practices and activation of the EMS system.
2. On-going training for the safety officer in injury issues, work-site hazards, and the control of these.

SECTION 700 APPENDICES

OVERVIEW

This section is organized in five sub-sections.

- **Section 710 Glossary**
- **Section 720 Resources and References**
- **Section 730 Recommended EMS Equipment and Supplies**
- **Section 740 Sample Record Form**
- **Section 750 Past Priorities**

710 Glossary

Section 711 defines acronyms used in this guide. **Section 712** contains explanations of some EMS terms used in this guide. Definitions of the medical procedures, equipment, and specialist categories mentioned are not included.

711 Acronyms

AAC: Alaska Administrative Code
AANHS: Alaska Area Native Health Service
ACEMS: Alaska Council on EMS**ACLS**: Advanced Cardiac Life Support
ADEC: Alaska Department of Environmental Conservation
ADES: Alaska Division of Emergency Services
ADHSS: Alaska Department of Health and Social Services
AHA: American Heart Association
ALS: Advanced Life Support, see Section 712
AMSEA: Alaska Marine Safety Education Association
AKPIRG: Alaska Public Interest Research Group
APLS: Advanced Pediatric Life Support**ARC**: American Red Cross
AS: Alaska Statute
ASTM: American Society for Testing and Materials
ATLS: Advanced Trauma Life Support
ATR: Alaska Trauma Registry
BFA: Basic First Aid
BLS: Basic Life Support

BTLS: Basic Trauma Life Support**CAP**: Civil Air Patrol
CDC: Centers for Disease Control and Prevention
CHA: Community Health Aide
CHP: Community Health Practitioner
CISM: Critical Incident Stress Management
CME: Continuing Medical Education
CPR: Cardiopulmonary Resuscitation**CQI**: Continuous Quality Improvement
CSHB: Committee Substitute for House Bill
DHSS: Department of Health and Social Services, State of Alaska
DMAT: Disaster Medical Assistance Team**DNR**: Do-Not-Resuscitate
DO: Doctor of Osteopathy
DOT: Department of Transportation
ED: Emergency Department
EMD: Emergency Medical Dispatcher
EMS: Emergency Medical Services
EMSC: Emergency Medical Services for Children
EMSS: Emergency Medical Services System
EMT: Emergency Medical Technician
EMT-D: EMT Defibrillator, see *Defibrillator Technician*
EOC: Emergency Operations Center
EPCRA: Emergency Planning and Community Right-to-Know Act
ETT: Emergency Trauma Technician**ETT-D**: ETT Defibrillator, *see Defibrillator Technician*
FA: First Aid
FAA: Federal Aviation Administration
FACS: Fellow of the American College of Surgeons
FEMA: Federal Emergency Management Agency
FY: Fiscal Year
HB: House Bill
ICD: International Classification of Diseases
IHS: Indian Health Service
IREMSC: Interior Region EMS Council
LEPC: Local Emergency Planning Committee
LEPD: Local Emergency Planning District
MD: Medical Doctor
MICP: Mobile Intensive Care Paramedic, see **Section 712**
MICU: Mobile Intensive Care Unit **MLP**: Mid-Level Practitioner**911-E**: 911-Enhanced
NABEMS: Northwest Arctic Borough Emergency Medical Services
NEISS: National Electronic Injury Surveillance System
NFPA: National Fire Protection Association

NHTSA: National Highway Traffic Safety Administration
NIH: National Institutes of Health
NIOSH: National Institute for Occupational Safety and Health
NP: Nurse Practitioner
NR: National Registry
NSEMS: Norton Sound Emergency Medical Services
NSBEMS: North Slope Borough Emergency Medical Services
OSHA: Occupational Safety and Health Administration
PA: Physician Assistant
PALS: Pediatric Advanced Life Support **PASG**: Pneumatic Antishock Garment
PFD: Personal Flotation Device
PHS: Public Health Service
PHTLS: Prehospital Trauma Life Support, see **Section 712**
PIE: Public Information and Education
PL: Public Law
PSA: Public Service Announcement
QA: Quality Assurance
QI: Quality Improvement
RFP: Request for Proposal
RN: Registered Nurse
SAR: Search and Rescue
SARA: Superfund Amendments and Reauthorization Act
SB: Senate Bill
SERC: State Emergency Response Commission
SEREMSC: Southeast Region EMS Council
SFA: Safety and First Aid
SPRANS: Special Project of Regional and National Significance
SREMSC: Southern Region Emergency Medical Services Council
TAT: Technical Assistance Team
US: United States
USCG: United States Coast Guard
USDOT: United States Department of Transportation
USPHS: United States Public Health Service
VPSO: Village Public Safety Officer **YKHCEMS**: Yukon Kuskokwim Health Corporation EMS
YPLL: Years of Productive Life Lost

712 Definitions

Acute Care: Medical treatment rendered to individuals whose illnesses or health problems are of a short-term or episodic nature. Acute care facilities are those hospitals that mainly serve persons with short-term health problems.

Alaska Council on Emergency Medical Services: An eleven-member Governor-appointed board which advises the Department of Health and Social Services and Governor on EMS program policies and planning, priorities, expenditures and implementation. In addition, several agency representatives and the State EMS Medical Director are ex-officio members of the Council.

Advanced Cardiac Life Support: A 16-hour course offered by the American Heart Association to train physicians, nurses, paramedics, physician assistants, and other advanced level personnel in emergency cardiac care. ACLS certification is for two years.

Advanced Life Support Services: The capability to stabilize and transport patients suffering from life-threatening physiological and psychological conditions, using appropriate invasive and non-invasive medical procedures. *AS.18.-08.090 (7)* defines the invasive medical procedures of advanced life support as "emergency care techniques provided under the written and oral orders of a physician which may include, but are not limited to, manual electric cardiac defibrillation, administration of antiarrhythmic agents, intravenous therapy, intramuscular therapy, or use of endotracheal intubation devices."

Ambulance: A vehicle specifically designed or modified, equipped and maintained for use in providing BLS or ALS patient transportation.

Advanced Pediatric Life Support: A course developed by the American Academy of Pediatrics and the American College of Emergency Physicians.

Advanced Trauma Life Support: A 16-hour course developed by the Trauma Committee of the American College of Surgeons to train physicians in the immediate care of the trauma patient. ATLS certification is for four years.

Alaska Trauma Registry: A data collection system which compiles information on the circumstances, treatment, and outcome of all

hospitalized injuries in Alaska, for the purpose of injury surveillance and trauma care assessment.

Basic Life Support Services: The capability to stabilize and transport patients suffering from life-threatening physiological and psychological conditions, without the use of medications or invasive medical procedures.

Basic Trauma Life Support: A two-day course, developed by the Alabama Chapter of the American College of Emergency Physicians, designed to teach the skills necessary for rapid assessment, resuscitation, packaging and transport of a trauma patient. The primary objectives are to teach the correct sequence of evaluation and the techniques of resuscitation and packaging of the patient.

Central Dispatch: A communications center for dispatching all public safety and emergency resources – police, fire and ambulance services – for coordinated emergency response.

Communications Reliability: The percentage of time a communications system, such as a radio or telephone system, is actually working when needed.

Community Health Aide: A permanent, local resident selected by a village council on the basis of his/her acceptability to village residents, reliability, and ability to gain patients' confidence; and trained by the Alaska Area Native Health Service or a Native Health Corporation to provide primary and emergency medical care to village residents. At least one CHA is employed by each Native community certified under the Alaska Native Land Claims Settlement Act. The CHA works under written standing orders and receives radio or phone consultation from medical supervisors. An Alternate CHA is designated to perform these duties in the absence of the CHA.

Cardiopulmonary Resuscitation: A technique of sustaining respiration and circulation artificially by a combination of orally or mechanically assisted breathing and precise, timed pressure on the sternum to alternately compress and allow the expansion of the chambers of the heart. There are different CPR techniques for adults (one rescuer and two rescuers), children, and infants.

Critical Access Hospital (CAH): A small, rural hospital that has conducted a financial feasibility assessment, met certain eligibility criteria, and has been designated as a CAH to improve financial reimbursement.

Critical Care Air Ambulance Service: A service that operates fixed-wing aircraft or helicopters appropriate for air medical operation and that provides emergency medical care and air transportation under the direct or indirect supervision of a physician medical director, within the skill levels of people trained at least to the MICP, PA-C, RN, CEN, MD, or DO. State-certification of critical care air ambulances is in accordance with *7 AAC 26.310-400*. (See **Section 722**.)

Critical Incident Stress Management: Certain events, or critical events, are particularly stressful and cause strong emotional reactions or the actual inability to function effectively at the scene or later. A debriefing provides a structured means for immediate crisis intervention in a confidential, non-threatening environment. A CISM team is composed of peer members and mental health professionals who assist in normalizing the rescuer's responses to critical incidents.

Defibrillator Technician: Emergency Trauma Technicians may be trained and certified as defibrillator technicians to use manual defibrillators. Defibrillator Technicians are required to have physician medical directors and should operate in locations with access to advanced cardiac life support, including endotracheal intubation and lidocaine. EMS personnel, first responders, and lay rescuers may be trained to use automated external defibrillators through AED programs taught by the American Heart Association, the American Red Cross, or another program approved by the Department of Health and Social Services.

Disaster Drill: An organized practice session which tests the local or regional disaster plan by simulating disaster conditions requiring patient diagnosis and treatment, and tests the readiness and coordination of all emergency response and public safety agencies charged in the disaster plan with specific responsibilities in time of disaster.

Disaster Medical Assistance Team: medical teams throughout the nation that can be mobilized on short notice and transported to major disaster sites. Team members become temporary employees of the U.S. government upon activation. Alaska has one DMAT. It is based in Anchorage and is called AK DMAT-1.

Do-Not-Resuscitate Order (DNR): A binding physician directive for the withholding of resuscitative measures for terminally ill persons. The Section of Community Health and EMS administers the Alaska Comfort One Do-Not-Resuscitate program which provides a statewide standard for the issuance of, and response to, DNR orders in the field.

DOT Standards: Standards recommended by the US Department of Transportation, National Highway Traffic Safety Administration.

Emergency Care Areas: Refers to the following critical care areas: trauma, including head, neck and spinal injuries, chest and abdominal injuries, extremity injuries, and amputations; cardiac; burns; near-drowning; hypothermia and frostbite; poisoning and overdoses; emergency childbirth; high-risk infant newborn resuscitation; pediatric emergencies; behavioral emergencies; victims of domestic violence, sexual assault, and child abuse; individuals of danger to self and others; dive emergencies (where appropriate); and diabetes and other medical emergencies.

EMS Communications System: The communications network and equipment, personnel and arrangements which provide the capability to notify the system of an emergency; mobilize and dispatch emergency responders and other resources; exchange information; transmit treatment advice; and in some areas, allow remote monitoring of vital indicators.

EMS Community Checklists: Standardized checklists developed and distributed by the EMS Unit, Alaska Department of Health and Social Services, to facilitate evaluation of local, regional and statewide status of the EMS system, as compared to the goals listed in this planning guide. Checklists appropriate for each Community Level are available through the state or regional EMS offices.

EMS Coordinator: person designated by the local, regional or state agency designated as the lead agency for EMS systems development in that area, who works with EMS organizations, other emergency response agencies, hospitals and others to facilitate improvement and coordination of the EMS system.

EMS Council: A formally established and responsible entity representing both providers and consumers of emergency medical services which reviews, evaluates and advises on the provision of such services in a defined system's geographical area. In Alaska, EMS Councils function at local, sub-regional and state levels. At the regional level, the Councils have formed non-profit corporations and employ staff to plan, coordinate and implement development of EMS systems in their region.

EMS Medical Director: A physician responsible for providing overall medical direction and consultation for state or regional or local EMS programs. A local EMS Medical Director (or Advisor) also should provide medical direction of prehospital medical services and provide leadership in hospital emergency department operations. (See **Section 315**.)

EMS Regions: Alaska is divided into seven EMS regions (see **Section 140**). These regions reflect patient care flow patterns. Each region has an EMS director or coordinator designated by either an EMS Council which is an independent non-profit corporation, an organized Borough, or a non-profit Native Corporation. State grants for coordination and improvement of regional/subarea EMS systems are provided through the EMS Unit, DHSS, which is charged with over-all coordination of the Alaska EMS System.

EMS Subareas: Three of Alaska's seven EMS regions, Interior Region, Southeast Region, and Southern Region, are further divided into subareas, which reflect Native corporations or Borough boundaries (see **Section 140**). Most of these subareas also have EMS coordinators designated by the Native corporation or Borough entity recognized as the lead agency for EMS coordination in the subarea. State grants for coordination and improvement of regional/subarea EMS systems may be provided through the EMS Unit, DHSS, which is charged with over-all coordination of the Alaska EMS system.

Emergency Medical Technician I: An EMT I, as certified by the Alaska Department of Health and Social Services, has successfully completed a course, at least 120 hours in length, which incorporates the in-classroom objectives of the US Department of Transportation, National Standard EMT-Basic Training, excluding the use of automated external defibrillators and advanced airway devices. An EMT I provides basic life support such as splinting, hemorrhage control, oxygen therapy, suction and CPR. Under the direct or indirect authorization of a physician, an EMT I may assist with the administration of the patient's own epinephrine

autoinjector, nitroglycerin, or hand held bronchodilator inhaler.

Emergency Medical Technician II: The EMT II level exceeds the National Standards Training Program EMT-Intermediate, developed by the USDOT. The EMT-II class is at least 50 hours in length and prepares the student to initiate intravenous lines and administer fluids and certain medications. Certification requires that the individual be under the sponsorship of a department approved physician medical director.

Emergency Medical Technician III: The EMT-III training program is designed to add basic cardiac care skills to those the EMT has learned already. Also included in the training program is the use of morphine, lidocaine, atropine, and epinephrine. The EMT-III training is at least 50 hours in length. Certification requires that the individual be under the sponsorship of a department approved physician medical director.

EMT Instructor: EMT I Instructors certified by the Department of Health and Social Services must have a minimum of one year experience as an EMT I, score 90 percent or above on an EMT-I examination, and successfully complete a Department-approved EMT-Instructor course. Certified EMT-II or EMT-III Instructors must be approved by the Department based upon teaching experience and experience with EMT IIs and EMT IIIs. EMT-II and EMT-III Instructors must be physicians, RNs, physician assistants or mobile intensive care paramedics, and must pass exams.

Emergency Monitor: A designated person, who may be a trained volunteer, who monitors CB radio traffic to relay requests for emergency assistance to an appropriate emergency services dispatcher.

Emergency Room/Emergency Department: An emergency room is a separate, designated area of a hospital that contains or has available to it, appropriate equipment and space for adequate triage, diagnosis, initial stabilization and treatment of medical emergencies occurring outside the hospital, at all times. An emergency department has been further designated a separate department of the hospital by the medical staff and hospital and is under the direction of a physician appointed as department chair.

Emergency Trauma Technician: This is a 44-hour course originally developed by the Public Safety Academy, and in recent years revised by the Southeast Region EMS Council, especially for workers at isolated high-risk occupation sites, which emphasizes emergency care for trauma victims, as well as medical communications and medevac preparations. Emergency Trauma Technicians are not technically certified by the state of Alaska and therefore do not receive the limited immunity from liability conferred by *AS 18.08.086*.

Epidemiology: The study of the distribution and determinants of health-related states and events in populations, and the application of this study to control health problems.

Federal Emergency Management Agency: Responsibilities include assistance in all aspects of community planning, preparedness and response to the full range of likely disasters and emergencies, including recommendation for a presidential-declared disaster area and administration of disaster funds. Provides a range of expertise and administrative skills in community preparedness planning via state emergency offices.

First Aid Courses: First aid courses are intended for lay rescuers and first responders and include basic life support practices. Regional councils provide other courses such as Mariner's First Aid and Emergency First Aid.

First Responder: An employee, such as a public safety officer or fire fighter, or a volunteer who is trained to provide advanced first aid or injury management to victims of medical emergencies prior to the arrival of an ambulance or other BLS/ALS services. Designated *citizen first responders* may be included in the formal emergency response system by radio or telephone dispatching procedures, and a program of continuing education. The Emergency Trauma Technician is an example of a first responder.

Incident Command System (ICS): A combination of facilities, equipment, personnel, procedures, and communication operating within a common organizational structure responsible for management of assigned resources to effectively direct and control the response. Intended to expand or contract as situation requires without a new, reorganized command structure. Under Administrative Order 170, all state agencies using an Incident Command System are required to use the NIIMS ICS model.

Injury: Damage to tissue caused by the exchange of kinetic, thermal, chemical, electrical or radiation energy at levels intolerable to tissue, or the deprivation of oxygen due to suffocation.

Injury Prevention and Control: An organized effort to prevent injuries or to minimize their severity.

Intentional Injury: An injury which is determined to have been purposely inflicted, either to oneself or another.

International Classification of Diseases Codes: A classification of the nature of illness or injuries (N-Codes), and external cause of injuries (E-codes), developed by the World Health Organization.

Levels of Community: A planning concept originally developed for the Alaska State Health Plan and revised by DHSS health planners and researchers. In the EMS model, communities are categorized according to population, type of health services and access. Communities are categorized within a regional system which provides a continuum of service and referral patterns.

Medevac: The air transportation of an ill or injured person to a medical facility, usually from an isolated setting or over an extremely long distance, where standard ground ambulance transportation is not possible and/or advisable, with personnel trained to at least the EMT-I level.

Medevac Escort Training: Medevac escort training courses approved by the Alaska Department of Health and Social Services cover –such topics as planning for medevac; aircraft and equipment considerations; physiological aspects of pressure and the atmosphere; supporting activities; lifting, moving and in-flight patient care; medical equipment; environmental factors; dealing with changes in-flight; and aircraft emergencies. These course requirements are detailed in *7 AAC 26.310-7 AAC26.400* and are covered in the series of training manuals, *Aeromedical Evacuations in Alaska*. (See **Section 722**.)

Medical Audit: A periodic review of an ambulance service's run reports, or an emergency care provider's patient records, by a supervising physician to determine if the care was appropriate and if standing orders were followed; possible problem areas; need for further training or practice, etc. Also known as a run review.

Medical Direction: An organized capability to give direct instructions by radio or telephone, as well as through standing orders, by a designated physician to allied health professionals providing pre- or inter-hospital care to critical emergency medical or trauma patients. This includes, but is limited to: initial training and continuing education; definition and refinement of standing orders; actual communication with out-of-hospital personnel; and coordination of patient care with medical professionals to whom the patient is referred under emergency conditions.

Mid-Level Practitioner: A physician assistant, nurse practitioner or other highly trained person who is licensed to carry out certain primary care medical functions under the sponsorship or direction of a physician.

Mobile Intensive Care Paramedic: A MICP, as licensed by the State Medical Board, must have successfully completed a Board-approved course equivalent to the U.S. Department of Transportation's National Training Course/Emergency Medical Technician Paramedic; must pass the National Registry of Emergency Medical Technicians written and practical examinations for EMT-P; and must work under standing orders of a sponsoring physician. The MICP may, under verbal or standing orders, perform cardiopulmonary resuscitation and defibrillation; initiate and maintain intravenous routes using approved intravenous techniques and solutions; perform pulmonary ventilation by approved methods; perform gastric suction by intubation; obtain blood for laboratory analysis; apply rotating tourniquets; administer parenterally, orally or topically any approved agents or solutions; and perform other emergency procedures authorized by a supervising physician. The training for a Mobile Intensive Care Paramedic is significantly longer and more intensive than that of an EMT-III. MICP programs are typically over 1,200 hours in length and include a field internship that is at least 480 hours in length. The Department of Health and Social Services certifies Mobile Intensive Care Course Coordinators and approves MICP courses taught in Alaska.

Mobile Intensive Care Units: Ambulances with appropriate equipment (including a defibrillator) and drugs for pre-hospital treatment of acute coronary patients and other medical and

trauma patients, with advanced life support measures.

Morbidity: The state of being diseased or injured. Morbidity rate is the number of cases of a disease or injury found to occur in a stated population size.

Mortality Rate: The incidence of death in a population in a given period.

Mutual Aid Agreements: Formal written arrangements among EMS providers within an EMS system or within systems serving neighboring areas for the provision of emergency medical services on a reciprocal basis, where access to these services would be more appropriate and effective in terms of time, distance and availability.

911: A universal emergency access telephone number for contacting police, fire and medical agencies; recommended by the federal government, and used extensively throughout the United States, including many Alaska communities.

911 Enhanced System: An advanced version of the 911 universal emergency telephone service; features include automatic number identification, automatic call location identification, and automatic ring-back. Referred to as 911-E.

Nurse Practitioner: A professional registered nurse who is prepared, through an organized program of continuing education which includes theory and clinical practice, to work as a co-professional with the physician in the delivery of primary health care. Nurse practitioners are responsible for their practice by virtue of their license.

Pediatric Advanced Life Support: Course developed by the American Heart Association and the American Academy of Pediatrics.

Physician Assistant: A graduate of a Physician Assistant Program accredited by the AMA Committee on Allied Health Education who has had training and supervised experience directed toward primary care and emergent morbidity conditions and related medical procedures. PAs in Alaska practice under the direct or indirect supervision of a licensed physician who accepts responsibility and liability for the PA's practice and are licensed through the Alaska State Medical Board.

Physician Medical Director: An physician who authorizes Emergency Medical Technicians or Mobile Intensive Care Paramedics to provide out-of-hospital advanced life support in accordance with Alaska statutes. The specific responsibilities of Physician Medical Directors vary with the EMT certification levels and can be found in the state regulations, defined *under 7 ACC 26.610-7 AAC 26.700*.

Prehospital Care: Medical care given at the scene or during transport to a health care facility.

Prehospital Trauma Life Support: A 17-hour course developed by the National Association of Emergency Medical Technicians in cooperation with the American College of surgeon'' Committee on Trauma (Prehospital Care Subcommittee), to provide focus for advanced level prehospital care personnel (EMT-II or above) in the latest philosophy and techniques in managing the trauma patient. Especially suitable for prehospital services close to a hospital, where rapid stabilization and transport is possible.

Protocol: A structured, written document describing a specific method of management.

Quality Assurance: A means of measuring the quality of care provided by comparing actual care with predetermined standards.

Quality Improvement: A means of improving the quality of care provided by comparing actual care with predetermined standards and implementing a plan to reduce performance below the standards.

Specialty Air Medical Transport Team: The third level of air medical services.

State Health Plan: A plan developed by the Department of Health and Social Services. It focuses on planning a statewide system of health facilities, personnel and services sufficient to assure access to high quality preventive, therapeutic and rehabilitative measures in achieving high level wellness for social and individual fulfillment.

Transfer: Usually refers to the transfer of a patient from one medical facility to another which offers the most adequate and appropriate level of care available to effect the maximum recovery of the patient. A Transfer Guideline is a written plan, developed by physicians and agreed to as standard medical procedure, which identifies criteria for determining who should be transferred; appropriate referral facilities; procedures for arranging transfer; and appropriate treatment before and during transfer for specific types of patients.

Transport/Transportation: A service element of the EMS system that includes BLS or ALS ground, air or water transportation services for a specific service area. In Alaska's roadless areas, patient transportation often relies on commercial air services not set up primarily for patient transport.

Trauma Center: Centers established to provide standards for treatment of critically injured patients. There are four levels of trauma service centers:

1. Specialty Trauma Referral Center, Level One Trauma Service Centers,
2. Regional Trauma Center, Level II Trauma Service Centers,
3. Area Trauma Center, Level III Trauma Centers, and
4. Local Trauma Stabilization Center, Level IV Trauma Center.

The Department of Health and Social Services has the authority to certify trauma centers.

Treatment Guidelines: Written uniform treatment and care plans for emergency and critical patients, approved and signed by appropriate physicians and/or medical groups. Also known as medical protocols or standing orders.

Unintentional Injury: An injury which has occurred without anyone intending that harm be done.

Village Public Safety Officer: Trained and supervised by the Department of Public Safety, VPSOs provide law enforcement, fire fighting, emergency trauma treatment, water safety education and enforcement, and search and rescue coordination for the villages in which they reside.

Years of Productive Life Lost: the number of years a person died before reaching age 65.

720 Resources and References

This section contains available state EMS resources and references. The items **in Sections 721** and **722** are available through the State EMS Office as well as many of the regional EMS offices. For assistance, contact theSection of Community Health and EMS, Division of Public Health, Alaska Department of Health and Social Services, PO BOX 110616, Juneau, AK 99811-0616; 907-465-3027. The documents in **Section 723** are available from the regional office listed for each document. Most of the documents cited are available for download through the section's web site at:

http://www.chems.alaska.gov

721 General

Alaska EMS Directory – Lists all key EMS officials, regional offices, ambulance services, emergency medical services, hospitals, clinics, EMS training agencies in the state, and special emergency response agencies. The Directory is updated frequently and is available for download from the CHEMS web site.

Alaska EMS Goals - A guide for developing Alaska's EMS system. This state EMS plan provides a comprehensive overview of EMS in Alaska and includes specific community recommendations.

Alaska Best Practices in Injury Prevention – A manual describing injury prevention programs and projects throughout the state. Includes contact references.

Alaska Injury Prevention Plan – A document addressing morbidity and mortality as a result of intentional and unintentional injuries, and describing recommended actions to reduce those injuries.

Alaska Medevac Manual – A booklet with suggestions and guidelines aimed at rural, air medevacs but with applications for almost any type of emergency transport. Cost: $20.

Alaska Medevac Transport Form – A multi-copy report form incorporating all the minimum data recommended in these guidelines (see **Section 743**). Available at a nominal cost.

Alaska Prehospital Patient Report Form – A multiple copy report form for ambulance services that do not have a form (see **Section 742**). Available at a nominal cost.

Bioterrorism Resource Guide – A comprehensive listing of federal and state resources which may be involved in the detection and identification of threatened or actual bioterrorist events, and the subsequent response.

Domestic Violence Guide for EMS Personnel – A guide patterned after a resource developed in New Mexico which has information on the scope of domestic violence in Alaska, recognition of domestic violence, and appropriate EMS actions.

Emergency Response Guidebook – USDOT publication for first response to hazardous materials incidents.

Family Resource Guide – A booklet for families who have children with special needs.

Guide for EMTs in Alaska – A comprehensive guide for Emergency Medical Personnel in Alaska containing background information on the EMS system, training, testing and resources.

Guide for Instructors and Certifying Officers in Alaska – A comprehensive guide to course approval, student eligibility and certification testing in Alaska.

Help Along the Way – A brochure with map, service boundaries and telephone or radio numbers of all ambulance services along the major land and marine highways. Updated annually. Available free in quantity.

Injury Prevention Newsletter – a free monthly electronic publication distributed to members of the ak-ems, ak-prev, and ak-emsc list servers. It is designed to share resources, breaking news, training opportunities, product recalls, and suggestions to prevent injuries in Alaska.

Injury Surveillance and Prevention Program and Poison Control System websites – contain information on injury prevention programs, current activity calendars, and links to national and local resources.

RESPONSE: EMS ALASKA – A quarterly newsletter distributed to certified EMTs and electronically to members of the ak-response list server. Subscription free.

Serious and Fatal Child and Adolescent Injuries in Alaska, 1994-1998. Publication describing child injury in Alaska.

722 Alaska EMS Legislation and Regulations

- *Summary of EMS-Related Legislation in the State of Alaska* – Updated annually.
- **Vaccination Program for Volunteer Emergency Personnel** – *AS 18.15.250*.
- **Alaska Regulations for Certification of EMT Is, IIs, IIIs and EMT Instructors** – *7 AAC 26.010 – 7 AAC 26.170*.
- **Alaska Regulations for Mobile Intensive Care Paramedics** – *12 AAC 40.300 – 12 AAC 40.390*.
- **Alaska Regulations for Emergency Medical Services Outside Hospitals** – *7 AAC 26.210 – 7 AAC 26.290* (for ambulance services).
- **Alaska Regulations for Emergency Vehicle Operations** – *13 AAC 02. and 13 AAC 04.*
- **Alaska Regulations for Emergency Trauma Technicians Instructors and Approved Emergency Trauma Technician training courses** – *7 AAC 26.410 – 7 AAC 26.490*.
- **Alaska Regulations for Defibrillator Technicians and Approved Training Courses** – *7 AAC 26.510 – 7 AAC 26.590*.
- **Alaska Regulations for Medevac Services, Air Ambulance Services and Specialty Aeromedical Transport Teams Outside Hospitals** – *7 AAC 26.310 – 7 AAC 26.390*.
- **Alaska Regulations for Responsibilities of Medical Directors** – *7 AAC 26.610 – 7 AAC 26.700*.
- **Alaska Regulations for Trauma Centers and Trauma Registry** – *7 AAC 26.710 – 7 AAC 745*.
- **Alaska Regulations for Emergency Medical Dispatchers** – *7 AAC 810 – 840*.
- **Definitions** – *7 AAC 26.999*

723 State Guidelines

Division of Public Health, Alaska Department of Health and Social Services

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- *Alaska Burn Protocol*

- *Alaska Cold Injuries Guidelines*
- *Alaska Medevac Manual*
- *Alaska Prehospital Trauma Guidelines*
- *Alaska Trauma Triage, Transport and Transfer Guidelines*
- *Model Standing Orders*
- *Model Standard Operating Guidelines*

724 National Guidelines

Agency for Toxic Substances and Disease Registry

- *Managing Hazardous Material Incidents – Volume 1, EMS: A Planning Guide for the Management Contaminated Patients*
- *Managing Hazardous Material Incidents – Volume 2, Hospital Emergency Department: A Planning Guide for the Management of Contaminated Patients*
- *Managing Hazardous Materials Incidents – Volume 3, Medical Management Guidelines for Acute Chemical Exposures*

American Association of Poison Control Centers

- *Patient Management Guidelines for Poisonings*

American College of Emergency Physicians

- *Emergency Medical Directors*
- *Principles of EMS Systems*
- *Trauma Systems*

American College of Surgeons

- *Criteria for Hospital Resources for Care of Patients with Burn Injuries*
- *Essential Ambulance Equipment*
- *Hospital Emergency Department Guidelines*
- *Hospital Resources for Care of Injured Patients*

American Heart Association

- *Standards and Guidelines for CPR and Emergency Cardiac Care*
- *Standards for Emergency Cardiac Care in Advanced Life Support Unit*

American Hospital Association, Joint Committee on Accreditation

- *Guidelines and Criteria for Hospital Emergency Department Capabilities*

American Medical Association, Commission on Emergency Medical Services

- *Proposed Guidelines for Categorization of Hospital Emergency Capabilities*

Committee on Perinatal Health

- *Recommendations for the Regional Development of Maternal and Perinatal Health Services*

Emergency Department Nurses Association

- *Standards for Emergency Nursing Practice*

Occupational Safety and Health Administration (OSHA)

- *Standards for Medical and First Aid*

United States Department of Transportation, National Highway Traffic Safety Administration (NHTSA)

- *Standards for Prehospital EMS Relating to Highway Safety Programs*
- *Federal Specifications for Ambulances (KKK.A-1822)*
- *Curriculum Standards for Basic EMT, EMT Refresher, EMT-Paramedic, Extrication, Dispatcher, Emergency Vehicle Operation*
- *Air Ambulance Guidelines*

United States Department of Transportation, Research and Special Programs Administration, Office of Hazardous Materials Transportation

- *Emergency Response Guidebook*

725 State Materials Distributed by Regional EMS Offices

Southern Region EMS Council, Incorporated
6130 Tuttle Place, Anchorage, AK 99507; (907) 562-6449

- *Aeromedical Evacuations in Alaska* – A set of two manuals to help medevac escorts, air ambulance personnel, and physicians involved in arranging for transfer of emergency medical patients by air to definitive medical care. Includes: *An Escort Training Manual, Third Edition;* and *Instructors Guide, Third Edition*.
- *Lifelines* – Published quarterly

Southeast Regional EMS Council, Incorporated
P.O. Box 259, Sitka, AK 99835; (907) 747-8005

- *BLS Treatment Guidelines* booklet
- *Cold Water Winners* – An educational resource packet for parents, teachers, youth leaders, and safety personnel to teach non-swimming cold water safety, survival and rescue skills, for ages eight through twelve.
- *Emergency Trauma Technician Manual*
- *ETT Instructor Manual*
- *Southeast Alaska Regional Mass Casualty Plan*
- *EMS Quarterly* – regional newsletter

730 Recommended EMS Equipment and Supplies

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731 First Responders

731.1 First Responder Trauma Kit

a. Blood pressure cuff
b. Stethoscope
c. Penlight
d. Full arm splint (inflatable, wire ladder, or cardboard)
e. Full leg splint (inflatable, wire ladder, or cardboard)
f. Bandage scissors
g. Ring cutter
h. Pocket mask with 0_2 inlet
i. Kling or Kerlix, 4 inch, five
j. Kling or Kerlix, 2 inch, five
k. Multi-trauma dressings, two
l. 4”x4” gauze, 20
m. Triangular bandages, five
n. Reflective heat or space blanket
o. Thermometer, regular and low reading
p. Activated charcoal in suspension
q. Source of calories for diabetic emergencies
r. Examination gloves, at least 5 pairs
s. Set of oropharyngeal airways, sizes 0-6

t. Patient report forms
u. Set umbilical clamps
v. Bulb syringe
w. Wool blankets, several
x. 2 inch tape
y. Rigid cervical collars, assorted sizes
z. Occlusive dressing

731.2 First Responder Extrication Kit

a. Road flares
b. Wrench, 12 inch adjustable crescent
c. Screwdriver, 12 inch flat head
d. Screwdriver, 8 inch Phillips head
e. Hacksaw, 12 inch blade, 18 teeth per inch, oil can with light grade oil
f. Pliers, 12 inch vice grip
g. Hammer, five pound, 12 inch or 15 inch handle
h. Fire axe, 24 inch handle, combination acceptable
i. Crowbar, 51 inch pinchpoint
j. Bolt cutter, 9/15 inch opening
k. Ropes, tensile strength 5,400 pounds in protective bag
l. Hard hat – ANSI Z 89.1, one per occupant
m. Safety goggles – ANSI Z 37.1
n. Blanket, large heavy one for warmth and for patient protection during extrication
o. Mastic knife
p. Bale hooks, two
q. Spring-loaded center punch
r. Gauntlet leather gloves, one pair per rescuer
s. Pruning saw, heavy duty
t. Fire extinguisher, dry chemical

731.3 Hazardous Materials Response

a. United States DOT Emergency Response Guidebook
b. Binoculars (for use in conjunction with the *USDOT Guidebook*)

732 Ambulance Services

732.1 Basic Life Support (BLS) Ambulance Services

732.11 Ventilation and Airway Equipment

a. Portable suction apparatus: wide-bore tubing, rigid pharyngeal curved suction tip, Yankauer
b. Portable and fixed oxygen equipment: variable flow regulator, humidifier (on fixed equipment)
c. Oxygen administration equipment: adequate length tubing, masks (adult, child and infant sizes, transparent, non-rebreathing, Venturi and valveless, nasal prongs)
d. Bag-valve-mask: hand operated, self re-expanding bag (adult and infant sizes, FiO_2 equal to or greater than 0.85), O_2 port and oxygen reservoir (FiO_2, 0.9), clear mask (adult, child and infant sizes), valve (clear, easily cleanable or disposable, operable in cold weather)
e. Pocket mask with O_2 port
f. Demand valve type respirator (optional)
g. Airways: nasopharyngeal, oropharyngeal (adult, child and infant sizes), water soluble lubricant

732.12 Immobilization Devices (splints)

a. Traction (2 adult, 1 or 2 pediatric): lower extremity, limb support slings, padded ankle hitch, padded pelvic support, traction strap
b. Extremity immobilization devices: rigid support, appropriate material (cardboard, metal, vacuum, pneumatic, wood, plastic, etc.)
c. Backboards (2 long, 2 short or equivalent, and scoop stretcher) hand holds for moving patient, short (extrication – head to pelvis length), long (transport – head to feet)
d. Cervical Collars (assorted sizes)
e. Head immobilization devices (commercial or improvised)
f. Strapping materials
g. 2" tape

732.13 Bandages

a. Burn sheets: two clean (not sterile)
b. Triangle bandages with three safety pins each
c. Dressings, large and small
d. Roller (soft), 4" or larger
e. Non-sterile roller (elastic), 4" or larger
f. Occlusive dressing, 3" x 8" or larger
g. Adhesive tape, 2" or larger, assorted sizes
h. Multi-trauma dressings

732.14 Pneumatic Anti-shock Garment (PASG)

a. Compartmentalized (legs and abdomen separate), stopcocks for each section, inflation pump, lower leg to lower rib cage

732.15 Obstetrical (separate sterile kit)

a. Kit (towels, 4" x 4" dressing, umbilical tape type, clamps for cord, disposable scalpel, several pair of gloves, blanket, sanitary napkins, meconium aspirator)
b. Reflective heat blanket
c. Extra receiving blanket, head cover, towels for baby
d. Absorbent pads and draping materials

732.16 Miscellaneous

a. Automated external defibrillator
b. Universal precaution kit
c. Sphygmomanometers, large, adult and pediatric
d. Stethoscope
e. Heavy bandage scissors for cutting clothing, belts, boots, etc.
f. Container for medical wastes
g. Flashlight
h. Irrigating solution
i. Source of calories for treating diabetic patients
j. Hypothermia and fever thermometers
k. Hot packs
l. Cold packs
m. Activated charcoal in suspension
n. Syrup of ipecac
o. Kleenex
p. Towels
q. Washcloths
r. Blankets, wool
s. Sheets
t. Pillows
u. Pillow cases
v. Disposable emesis basins
w. Bed pan
x. Wheeled ambulance cot (gurney)
y. Stair chair (if ambulance cot does not fold into stair chair)
z. Self-contained breathing apparatus, NIOSH or NFPA approved
aa. Report forms
bb. Triage tags
cc. Spray cleaner/disinfectant
dd. Waterless hand cleaner
ee. Gloves, assorted.

732.17 Extrication

a. Road flares
b. Wrench, 12 inch adjustable crescent
c. Screwdriver, 12 inch flat head
d. Screwdriver, 8 inch Phillips head
e. Hacksaw, 12 inch blade, 18 teeth per inch, oil can with light grade oil
f. Pliers, 12 inch vice grip
g. Hammer, five pound, 12 inch or 15 inch handle
h. Fire axe, 24 inch handle, combination acceptable
i. Wrecking bar, 24 inch handle
j. Crowbar, 51 inch pinchpoint
k. Bolt cutter, 9/16 inch opening
l. Shovel, 49 inch pointed blade or folding heavy-duty entrenching tool
m. Tin snip, double action
n. Ropes, 50' (tensile strength 5,400 pounds in protective bag)

Hard hat – ANSI Z 89.1, one per occupant
Safety goggles – ANSI Z 37.1

o. Blanket, large heavy, flame proof, for patient protection during extrication
p. Heavy knife
q. Bale hooks, two
r. Spring-loaded center punch
s. Gauntlet leather gloves, one pair per rescuer
t. Pruning saw, heavy duty
u. Fire extinguisher, dry chemical

732.2 Advanced Life Support Ambulance Services – EMT-II Level and Above

For the EMT-II provider, all the equipment and supplies for the EMT-I as listed in the preceding section, plus the following equipment and supplies, only as authorized by written medical standing orders signed by Physician Medical Director.

732.21 Intravenous Administration Equipment

a. Crystalloid solutions
b. 5 percent dextrose in water
c. Micro- and macro-intravenous administration set, 3 each
d. Intravenous catheter with needle, 20, 18, 16, 14 gauge, shortest possible length for larger bore catheters; six each
e. Tourniquet
f. Antiseptic solution
g. IV pole or roof hook
h. Sharps container
i. Tape

j. 2” x 2” gauze
k. Blood tubes
l. Syringes, assorted
m. Needles, assorted

732.22 Airway

Advanced airway device specified in service’s physician signed standing orders, and all equipment necessary to use device properly, e.g., laryngoscope with assortment of blades, endotracheal tubes, and 10 cc syringes.

732.23 Drugs

Drugs should be pre-loaded. Drugs used on ALS units should be compatible with the standards set by the American Heart Association’s Emergency Cardiac Care Committee.
a. Naloxone HCI
b. 50 percent dextrose in water

732.3 ALS Ambulance Services – EMT-III Level

For the EMT-III provider, all the equipment, drugs and supplies for the EMT-I and EMT-II as listed above, plus the following equipment and supplies, only as authorized by written medical standing orders signed by Medical Director.

732.31 Cardiac

a. Monitor/defibrillator, with strip recorder
b. Defibrillator pads
c. Quick look paddles
d. ECG leads
e. Chest attachment pads
f. Conductive gel

732.32 Drugs

These should be pre-loaded.
a. Lidocaine
b. Morphine
c. Epinephrine 1:1,000
d. Epinephrine 1:10,000
e. Atropine

732.4 Advanced Life Support (ALS) Ambulance Services – Paramedic Level

For the EMT-P provider, all the equipment, drugs and supplies for the EMT I, II, and III as listed in the preceding sections, plus the following drugs, only as authorized by written medical standing orders signed by Physician Medical Director.

732.41 Drugs

a. Crystalloid solution
b. 5 percent dextrose in water, various sizes
c. Nitrate
d. Vasopressor
e. Diuretic
f. Analgesic
g. Acid/Base buffer
h. Opiate antagonist
i. Cardiac Inotrope
j. Cardiac Chronotrope, sympathomimetic
k. Cardiac Chronotrope, anticholinergic
l. Group 1B Antiarrhythmic
m. Group III Antiarrhythmic
n. 50 percent dextrose
o. Tranquilizer
p. Natural catecholamine
q. Dopaminergic

732.42 Equipment

a. Pulse oximeter
b. Cardiac monitor and defibrillator

735.5 Heavy Rescue Ambulance Services

The following additional equipment should be available either on the primary response vehicle or on a heavy rescue vehicle with a maximum response time of 10 minutes. Local extrication needs may necessitate additional equipment and the associated specialized training (scuba gear for water rescue; aerial rescue gear for tall buildings; mountain rescue equipment, etc.).

732.51 Equipment

a. Hydraulic jack/spreader combination, 2 to 4 ton minimal
b. 2x4 wood, various lengths for shoring
c. Two ropes, 150’ each, 5/8” Kernmantle construction, maximum 2 percent stretch factor, 11,000 lbs. Minimum tensile strength (must be carried in a protective bag)
d. Swiss seat
e. Carabineers, locking type, minimum rod stock 10 mm (minimum 10)
f. Stokes basket
g. Come-along, minimum 5 ton with break-away handle
h. Chain (15’) with a grab hook and a running hook

i. Air-cutting gun kit, minimum generating pressure 90 PSI, with cylinders and chisels
j. Hydraulic truck jack, minimum 4 tons
k. Rappelling harness, one per rescuer
l. Wheel chocks

732.6 Pediatric Ambulance Equipment

The following lists were developed by the Alaska EMS for Children Project. **Section 732.61** shows suggested equipment for BLS services. **Section 732.62** shows suggested equipment for ALS services. Italicized items are optional.

732.61 BLS Pediatric Ambulance Equipment

a. Infant bag valve/mask
b. Neonatal-Infant masks
c. Pediatric bag valve/mask
d. Pediatric masks, 2 sizes
e. Pediatric non-rebreather mask
f. Child nasal cannula
g. Asst. oral airways, 00-3
h. Bulb syringe
i. DeLee suction trap, 10 Fr.
j. Rigid suction tips, Yankauer
k. Pediatric stethoscope
l. Blood pressure cuffs, infant/child
m. Blood pressure cuffs, newborn
n. Water-soluble lubricant, Lubafax
o. Cardboard splints, 12" x 18"
p. Triangular bandages
q. Traction splint, pediatric
r. Pneumatic antishock garment, pediatric
s. Rigid cervical collars, pedi set
t. Extrication device, KED/Short board
u. Silver swaddler
v. Cord clamps
w. OB kit
x. Child backboard
y. Spider straps
z. Infant seat
aa. Ipecac

732.62 ALS Pediatric Ambulance Equipment

a. Infant bag valve/mask
b. Neonatal-Infant masks
c. Pediatric bag valve/mask
d. Pediatric masks, 2 sizes
e. Pediatric non-rebreather mask
f. Child nasal cannula
g. Asst. oral airways, 00-3
h. endotracheal tubes, 2.5-6.0
i. Intubation stylet, 6 Fr.
j. Laryngoscope blades: 0, 1, 2, straight
k. Laryngoscope blade, 2 curved
l. Pediatric McGill forceps
m. Bulb syringe
n. DeLee suction trap, 10 Fr.
o. Suction catheters: 6, 8, and 10 Fr.
p. Rigid suction tip, Yankauer
q. Pediatric stethoscope
r. Blood pressure cuffs, infant/child
s. Blood pressure cuffs (newborn)
t. Volume control IV tubing, e.g. Buritrol, Volutrol
u. Over-the-needle catheter, 18-24 gauge
v. Butterflies, 19-23 gauge
w. Tourniquets, infant-child
x. Intraosseous needles, 15-18 gauge
y. Syringes: 1, 3, 12, 35, 50 cc
z. Blood tubes (pediatric)
aa. Blood glucose chemstrips
bb. Alcohol preps
cc. Betadine swabs
dd. Water-soluble lubricant, Lubafax
ee. Lidocaine ointment
ff. Pediatric defibrillator paddles
gg. Pediatric electrodes
hh. Cardboard splints, 12" x 18"
ii. Triangular bandages
jj. Traction splint, pediatric
kk. Pneumatic antishock garment, pediatric
ll. Rigid cervical collars, pediatric set
mm. Extrication device, KED/Short board
nn. Silver swaddler
oo. Cord clamps
pp. OB kit
qq. NG tube, 10 and 12 Fr.
rr. Feeding tube, 8 Fr.
ss. Meconium aspirator (attach to ET tube)
tt. Epinephrine 1:10,000, pediatric dose pkg.
uu. Atropine, pedi dose pkg.
vv. D25 glucose, pedi dose pkg.
ww. Pediatric medication dosage chart
xx. Child backboard
yy. Spider straps
zz. Infant seat
aaa. Ipecac
bbb. Ringer's lactate
ccc. Disposable scalpel with blade

732.7 Hazardous Materials Decontamination

Equipment for EMS units is highly dependent on the role the unit has in the local emergency response plan. Recommendations given here are for the basics as well as for a more involved decontamination scenario.

732.71 Equipment for Most Circumstances

a. Polyethylene sheeting (.006 ml) for draping ambulance and/or patient
b. Duct tape
c. Chemical resistant splash goggles
d. Chemical gloves with a minimum 15" to 18" gauntlet
e. Inner gloves
f. Tyvek-Saranex hooded chemical resistant suit
g. Nuke style overboots
h. United States DOT Emergency Response Guidebook
i. Binoculars (for use in conjunction with the *USDOT Guidebook*)
j. NIOSH Pocket Guide to Chemical Hazards
k. Reference for information about chemical exposure to the patient (*Hazardous Materials Exposure from Brady, First Aid Manual for Chemical Accident* by Lefevre, or *Emergency Care for Hazardous Materials Exposure* by Bronstein and Currance)
l. Disposable sheets
m. Disposable patient garments or blankets
n. Plastic trash bags for contaminated items
o. Inexpensive devices such as stethoscopes, blood pressure cuffs, etc. to be used when personnel do not want to expose their personal devices

732.72 Equipment for Heavy or Corrosive contamination

The equipment listed will **not** allow EMS personnel to work in the warm zone in a decontamination corridor. Working in a warm zone requires specialized training and equipment. Both the SCBA and respirator (items a and b below) require training, fit testing, and medical checks of personnel to ensure that they are fit to wear both.

a. Positive-pressure self-contained breathing apparatus (SCBA)
b. Full-face mask respirator with appropriate cartridges
c. Gurney cover with water containment device in the even that continuous patient flushing is required

733 Air Transport Services

The following sections outline lists of suggested equipment for use in the aeromedical environment. When reviewing the lists, it is important to note that they suggest the minimum equipment which should be available for a specific purpose (for instance, basic care, airway maintenance, burns), and that many aeromedical services will carry much more than the minimum.

Most of the lists contain generic descriptions of the devices suggested, such as a suction device. It is purposely left to individual services to determine which of the many devices could best perform a certain function, given the limitations of space, weight, funding, etc.

It is recommended that individuals with questions concerning the appropriateness of a particular device contact a Medevac Instructor and other aeromedical services, within and outside of Alaska.

733.1 Basic Equipment

a. Pneumatic antishock garment (PASG)
b. Oxygen
c. Stretcher/backboard
d. Blankets

733.2 Basic Life Support Kit

a. Hand operated suction device (V-Vac)
b. Oral airways (4 sizes)
c. Pocket mask with one-way valve
d. Bag-valve-mask (ambu bag), pediatric and adult
e. BP cuff, pediatric and adult
f. Stethoscope
g. Flashlight
h. Kerlix roll
i. Kling roll
j. 4 x 4 gauze, 10
k. Multi-trauma dressing
l. Band-aids, assorted
m. Triangle bandage, 5
n. Ace wraps, 3" and 4"
o. Non-sterile gloves
p. Scissors
q. Hemostats
r. Tape, several sizes
s. Thermometer, regular and hypothermic
t. KY jelly packet
u. Xeroform or other occlusive dressing
v. Cervical collars, all sizes
w. Plastic trash bags

x. Large safety pins, 5

733.3 Adult Kits

733.31 Adult Advanced Airway Kit

a. Hand-held suction device (V-Vac, suction bulb)
b. 14 Fr. Suction catheter kits, 4
c. Yankauer, 2
d. Suction connecting tubing
e. 5.5 ET tube, cuffed
f. 6.0 ET tube, cuffed
g. 7.0 ET tube, cuffed
h. 7.5 ET tube, cuffed, 2
i. 8.0 ET tube, cuffed
j. Stylet, 14 Fr.
k. Gloves, 4
l. Heimlich valve, 2
m. Nasal cannula, adult
n. Non-rebreather mask
o. Nebulizer
p. O_2 connecting tubing
q. Ambu with face mask
r. O_2 connecting tubing for ambu
s. Adhesive tape 2”
t. O_2 X-Mas tree
u. Albuterol UD nebulizer, 2
v. NS gavages, 5
w. Adult oral airways (medium and large)
x. Intubation handle, adult
y. Mac 3, adult blade
z. Miller 3, adult blade
aa. Miller 4, adult blade
bb. 10 CC syringe
cc. K-Y jelly, 2
dd. Batteries for laryngoscope
ee. Intubation blade bulb
ff. Trocar 28 ga
gg. Trocar 32 ga
hh. Suture; silk
ii. #11 blade, handle (scalpel)
jj. Oximeter
kk. Magill forceps
ll. Kelly clamp
mm. 2 percent Lidocaine 30 cc, 2

733.32 Adult Emergency Medication Kit

a. Atropine sulfate pre-filled syringes, 2
b. Bretylium tosylate, 4
c. Dextrose, 25 mg/50 ml pre-filled syringes, 2
d. Dopamine 40 mg/ml 5 ml amps, 5
e. Epinephrine 1:1,000 ampules, 4
f. Epinephrine 1:10,000, pre-filled syringes, 4
g. Isuprel pre-filled syringes, 2
h. Lidocaine pre-filled syringes, 2
i. Lidocaine 500 cc pre-mixed bag, 1
j. Sodium bicarbonate pre-filled syringes, 2
k. Procainamide, 4
l. Propanolol, 2
m. Albuterol 2 mg/ml solution, 1

733.4 Pediatric Kits

733.41 Pediatric Kit

a. TB syringe, 5
b. 3 cc, 5 cc, and 10 cc syringe, 5 each
c. Heplock
d. 25 ga, 22 ga, and 18, ga needles, 4 each
e. Y connector
f. 5 in 1 connector
g. Simms connector
h. 2 oz and 4 oz syringe
i. 5 Fr, 8 Fr, and 10 Fr feeding tube
j. 60 cc irrigation tip syringe
k. DeLee trap, 2
l. 5 Fr, 8 Fr, and 10 Fr suction catheter,
m. Tongue blades, 2
n. Penlight flashlight
o. U-Bag, infant and pediatric, 2 each
p. Infant and child BP cuff
q. Oral and rectal thermometer
r. Oral airways, infant, pedi, med. Size
s. 1” and 2” adhesive tape
t. Kerlix roll
u. Kling gauze roll
v. 2” x 2” and 4” x 4” gauze, assorted, 8
w. IV Buretrol
x. Specimen cup
y. Albumin 5 percent 250 cc
z. D_5W 100 cc, 4
aa. Pediatric EKG electrodes, 6
bb. 24 ga, 22 ga and 20 ga IV catheters, 4 each
cc. Tourniquet
dd. Four way stop cock, 2
ee. Microdrip IV tubing, 2
ff. Wrist boards, 3
gg. 21 ga, 23 ga, and 25 ga butterfly, 3 each
hh. Alcohol preps, 20
ii. IO needle (Jamshidi or Cook), 4
jj. LR 1000 cc
kk. NS 500 cc, 2
ll. 50 cc NS, 2
mm. 50 cc D_5W, 2

733.42 Pediatric Advanced Airway Kit

a. 6 and 8 suction catheters, 4 each
b. Yankauer, 2
c. Suction connecting tubing

d. 2.5 ET tube, uncuffed
e. 3.0 ET tube, uncuffed, 2
f. 3.5 ET tube, uncuffed, 2
g. 4.0 ET tube, uncuffed, 2
h. 5.0 ET tube, cuffed
i. 5.5 ET tube, cuffed
j. Stylet, 6 Fr
k. Stylet, 14 Fr
l. Gloves, 4
m. Heimlich valve, 2
n. Nasal cannula, pediatric
o. Nasal cannula, infant
p. Face mask, pediatric
q. Non-rebreather mask
r. Nebulizer
s. O_2 connecting tubing
t. Pediatric ambu with face mask
u. Infant and pediatric mask
v. Adhesive tape 2”
w. O_2 X-Mas tree
x. NS gavages, 5
y. Infant and child sized oral airways
z. Intubation handle, pediatric
aa. Miller 0, pediatric blade
bb. Miller 1, pediatric blade
cc. Miller 3, pediatric blade
dd. Mac 1, pediatric blade
ee. K-Y Jelly
ff. Batteries for pediatric intubation handle
gg. Intubation blade bulb
hh. Suture; silk
ii. #11 blade, handle (scalpel)
jj. Small curved clamp
kk. 2 percent Lidocaine 30 cc, 2
ll. Oximeter
mm. Magill forceps

733.43 Pediatric Emergency Medication Kit

a. Epinephrine 1 mg 1:1000, 4
b. Dilantin 100 mg (50 mg/ml), 2
c. Dextrose 25 percent
d. Sodium bicarbonate pediatric, 3
e. Lidocaine 2 percent 100 mg, 3
f. Epinephrine 1:10,000, 5
g. Narcan 0.4 mg/ml, 2
h. Anectine
i. Decadron 4 mg inj, 2
j. Phenobarbital 130 mg/ml tubex, 2
k. Solumedrol 40 mg/ml
l. Normal saline 30 cc
m. Albumin 5 percent 50 ml
n. Albuterol 2 mg/ml solution
o. Ipecac 30 ml, 2
p. Activated charcoal 15 gms
q. Lasix 10 mg/ml (10ml)
r. Ceftriaxone (1 gm vial), 2
s. Epinephrine 1:10,000 pre-filled syringes, 4
t. Bretylol 500 mg/10 ml, 2
u. Atropine 1 mg pre-filled syringes, 2
v. Lidocaine 2 percent 100 mg pre-filled syringe
w. Dopamine 200 mg/15ml, 2
x. Dobutrex 250 mg/20 ml
y. Bretylol
z. Morphine sulfate
aa. Demerol
bb. Valium
cc. Digoxin

733.5 Specialty Kits

733.51 OB Pack Kit

a. Disposable OB kit
b. Sterile scissors
c. Sterile large Kelley clamps
d. Doptone if available
e. Crib pack
    1. Receiving blankets, 2
    2. Bath towel
    3. Pedi stethoscope
    4. Stocking cap for baby
f. Infant supplies
    1. DeLee suction catheters, 2
    2. Bulb syringe
    3. Cord clamps, 2
    4. Neonatal mask
    5. Newborn mask
    6. Suction catheter 8 Fr
    7. Suction catheter 10 Fr
    8. Plastic ziplock bags, 2
g. Miscellaneous supplies
    1. Peripads, 2
    2. Sterile 4” x 4” gauze
    3. Chux, 10
    4. Small plastic bags, 3
    5. Large red isolation bag
    6. Red Top Tube, 2
    7. Purple Top Tube, 2
    8. Saran wrap

733.52 Trauma Kit

a. Examination gloves
b. Blood pressure cuff
c. Stethoscope
d. Penlight
e. Pen and pad
f. Gauze pads, 4” x 4”
g. Elastic rolls gauze
h. Adhesive tape in various widths

i. Trauma dressing
j. Bandage trauma scissors
k. Triangular bandages, 3
l. Pocket mask with a valve and oxygen port
m. Sterile, non-porous, non-adhesive dressing
n. Oral airways in assorted sizes

733.53 Burn Kit

a. Kerlix rolls 4", 6
b. Sterile gloves in assorted sizes
c. NS irrigation 1000 cc, 2
d. Kerlix fluffs (box), 4
e. Silvadine 1 percent 400 gms
f. Burn sheet, 2
g. Sterile sheets, 3
h. Burn fluid replacement formula
i. Hibiclens sponges, 4
j. Xerofoam gauze 5" by 9", 2

733.6 Hazardous Materials

An air medical crew should approach a mission where hazardous materials contamination is known or suspected with crew and aircraft safety as the primary consideration. A program for responding to the patient (s) involved in a hazmat incident must be in place, with procedures clearly outlined and available for the pilot and medical crew prior to lift off. The following standards are recommended for air medical services.

a. Flight crews should have annual hazardous materials training.
b. A list of potential contaminates that would ground a flight due to the risk to the aircraft and crew should be available to the air medical service.
c. Readily available reference materials available to the flight crew and communications center.
d. Lift-off protocols addressing response to a hazardous material incident should be in place.
e. A relationship with a local hazardous materials resource (such as a fire or safety officer) to ensure quick access to information as needed.
f. Landing zones and flight routes should be selected to ensure that no contact with any elements of a hazardous materials incident occurs.

734 Clinics

734.1 Level I Community Clinics

Equipment listed below includes items that an EMT-trained or CHA-trained responder should be prepared to use.

734.11 General Equipment

a. First responder kit

734.12 Ventilation and Airway Equipment

a. Portable suction apparatus: wide-bore tubing, rigid pharyngeal curved suction tip (Yankauer)
b. Portable oxygen equipment: variable flow regulator, humidifier (if resupply is not feasible, disposable oxygen)
c. Oxygen administration equipment: adequate length tubing, masks (adult, child and infant sizes, transparent, non-rebreathing, Venturi and valveless, nasal prongs)
d. Bag-valve-mask: hand-operated, self re-expanding bag (adult and infant sizes, equal to or greater than 0.85), O_2 port and oxygen reservoir (FiO_2, 0.9), clear mask (adult, child and infant sizes), valve (clear, easily cleanable or disposable, operable in cold weather)
e. Pocket mask with O_2 port
f. Demand valve type respirator (optional)
g. Airways: nasopharyngeal, oropharyngeal (adult, child, and infant sizes), water soluble lubricant

734.13 Immobilization Devices

a. Traction (2 adult, 1 or 2 pediatric): lower extremity, limb support slings, padded ankle hitch, padded pelvic support, traction strap
b. Extremity immobilization devices: rigid support, appropriate material (cardboard, metal, vacuum, pneumatic, wood, plastic, etc.)
c. Backboards (2 long, 2 short or equivalent, and scoop stretcher) hand holds for moving patient, short (extrication – head to pelvis length), long (transport – head to feet)
d. Cervical collars (assorted sizes)
e. Head immobilization devices (commercial or improvised)
f. Strapping materials
g. 2" tape

734.14 Bandages

a. Burn sheets: two clean (not sterile)

b. Triangle bandages with three safety pins each
c. Dressings, large and small
d. Roller (soft), 4" or larger
e. Occlusive dressing, 3" x 8" or larger
f. Adhesive tape, 2" or larger, assorted sizes
g. Multi-trauma dressings

734.15 Pneumatic Anti-Shock Garment (PASG)

a. Compartmentalized (legs and abdomen separate), stopcocks for each section, inflation pump, lower leg to lower rib cage

734.16 Obstetrical (separate sterile kit)

a. Kit (towels, 4" x 4" dressing, umbilical tape type, clamps for cord, several pair of gloves, blanket, sanitary napkins, DeLee suction device with trap)
b. Reflective heat blanket
c. Extra receiving blanket, head cover, towels for baby
d. Absorbent pads and draping materials

734.17 Miscellaneous

a. Sphygmomanometers, large, adult and pediatric
b. Stethoscope
c. Heavy bandage scissors for cutting clothing, belts, boots, etc.
d. Container for medical wastes
e. Flashlight
f. Irrigating solution
g. Source of calories for treating diabetic patients
h. Hypothermia and fever thermometers
i. Hot packs
j. Cold packs
k. Activated charcoal in suspension
l. Ipecac
m. Kleenex
n. Towels
o. Washcloths
p. Blankets (wool)
q. Sheets
r. Pillows
s. Pillowcases
t. Disposable emesis basins
u. Bed pan
v. Report forms
w. First responder type trauma kit (see **Section 731.1**)

734.18 Disposables

a. Emergency obstetrical kit
b. Poison antidote kit
c. 2" adhesive tape
d. ½" adhesive tape
e. 10" x 30" trauma dressings
f. Sanitary pads
g. Self adhering roller gauze
h. 4" ace elastic bandage
i. 4" x 4" gauze pads
j. Saran Wrap
k. Cold packs
l. Hot packs with towels to wrap in

734.19 Pediatric Equipment and Supplies

a. Oxygen tank with tubing, with humidified source for long transport times
b. Oral airways, size 0-5
c. Nasopharyngeal airways with lubricant, 12-30 F or equivalent sizes in mm
d. Self-inflating bags with oxygen reservoir: 250, 500, 1000 cc bags
e. Oxygen masks: infant, child, adult
f. Nasal cannulas: infant, child, adult
g. Masks for bag-valve mask: infant, child, adult sizes 1-3
h. Stethoscope
i. Blood pressure cuffs: infant, child, adult
j. Portable suction unit
k. Suction catheters (flexible and rigid), 6 to 14 F
l. Back boards, long and short
m. Towel rolls, blanket rolls or equivalent
n. Rigid extrication collar for children over 2 years: infant, child, small, medium, adult
o. Pediatric femur splint
p. Standard burn pack; towels or gel burn sheet acceptable
q. Thermal absorbent blanket
r. Equipment sizing tape or equipment/age/weight chart
s. Adhesive tape
t. Alcohol sponges
u. Arm boards, various sizes
v. Providine-iodine prep pads
w. Elastic bandages
x. Extra batteries and bulbs for equipment needs
y. Flashlight with extra bulb and batteries
z. Gauze rolls
aa. Gauze sponges
bb. Protective eyewear, gloves and masks
cc. Scissors
dd. Tincture of benzoin

ee. Tongue blades

734.2 Level II Community Centers

EMS equipment recommended for Level II Clinics includes basic life support equipment as recommended for the Level I Clinics plus the following equipment, depending upon the practitioner's level of training and experience, and standing orders approved by the supervising physician.

734.21 Trauma

a. IV equipment (see **Section 732.21**)
b. Cutdown tray
c. Small suture sets
d. IV warming device
e. Foley catheter tray
f. Chest tube tray
g. Cricothyroidotomy tray

734.22 Cardiac and Respiratory

a. Endotracheal tube/laryngoscope
b. Cardiac monitor/defibrillator
c. Emergency cardiac drugs (as recommended for ACLS)

734.23 Poisoning

a. Gastric lavage tray
b. Nasogastric tube
c. Intermittent suction device

734.24 Obstetrics

a. Infant warming blanket or radiant heater
b. Emergency OB kit – hospital size

734.25 Psychiatric

a. Patient restraints

734.26 Hypothermia

a. Heated humidified oxygen

734.27 Pediatric Equipment and Medications

a. Pediatric equipment and supplies for Level I Clinic (see **Section 734.19**).
b. Transport monitor, battery-operated with 3 or 4 lead wires; defibrillator with 4.25 and 8 cm paddles (or paddle adapter) and pads capable to dial down to appropriate watt-sec for pediatric patients
c. Monitor electrodes
d. Equipment and drug dosage tape or age weight chart
e. Chem strip for glucose and analyzer
f. Laryngoscope handle with extra batteries and bulbs
g. Laryngoscope blades, straight and/or curved: 0,1,2,3
h. Stylettes, pediatric sizes
i. Endotracheal tubes: uncuffed range 3.0-5.5; cuffed range 5.0-8.0
j. Magill forceps (Rachevsky)
k. Lubrication (water soluble)
l. Nasogastric tube, sizes 5 to 18 F
m. Intravenous catheter of choice, 14-22 g
n. Intravenous needles of choice
o. Tourniquet/rubber bands
p. Three-way stopcock or adapter allowing administration of additional fluids or medications
q. Syringes, various sizes
r. Blood sample tubes
s. Intravenous tubing, Burritol
t. Tuberculin syringes
u. Normal saline or lactated Ringer's
v. D5W (diluent)
w. Sodium chloride, bacteriostatic for injection
x. Water, bacteriostatic, for injection
y. Atropine sulfate, 0.1 mg/ml
z. Sodium bicarbonate, 8.4% (1.0 MEq/ml)
aa. Diazepam or analeptic of choice, 5 mg/ml
bb. Epinephrine, 1:1,000 (1mg/ml)
cc. Epinephrine, 1:10,000 (0.1 mg/ml)
dd. Lidocaine hydrochloride (IV), 10 mg/ml
ee. Naloxone hydrochloride (adult), 1.0 mg/ml
ff. Pain medication per medical control
gg. Inhalant beta adrenergic agent of choice
hh. Activated charcoal

734.3 Hazardous Materials Decontamination

Whenever possible, preliminary decontamination should occur outside the clinic. The following emergency supplies should be stored in an area near the emergency care area and checked periodically (e.g., quarterly):

a. **Written procedures for handling chemically-contaminated victims**.
b. **Protective clothing for staff**:
    1. **For most circumstances**: Disposable gowns, surgical masks, plain latex gloves (enough for double gloving), shoe covers, splash goggles (at least two pair), aprons, caps. At least some of the gowns, aprons, and shoe covers should be impervious to water.

2. **For heavy chemical or corrosive contamination**: At least 2 Tyvek or Saranex suits and 2 pair unmilled nitrile gloves (be sure to check with Poison Control or Hazmat team to see if they are compatible with the particular hazardous substance involved).

Note: Respiratory protective gear is not generally available and, in addition, should not be used unless it is properly maintained and staff have been properly fitted and trained in its selection and use. Therefore, if inhalation exposure is a risk, decontamination should be done **outside**.

c. **Decontamination supplies**:
   1. Inflatable kiddie pool (large) with foot operated air pump (or other means of collecting contaminated water)
   2. Large plastic tarp to place under pool forming an outer containment area
   3. 55 gallon plastic trash cans to hold water
   4. Mild dishwashing detergent or soap in squeeze bottle
   5. Sponges
   6. Absorbent pads for washing
   7. Nail brush
   8. Tent or curtain for privacy
   9. Exterior wall water outlet/shower nozzle hooked up to lukewarm (or cold) water supply
   10. Metal gurney or morgue table for non-ambulatory patients
   11. Plastic bags for double-bagging contaminated clothing (preferably clear).
   12. Diking or absorbent material (dikes can be made by taping the edges of a large plastic tarp or sheets or plastic draped over a ladder turned on its side or rope strung horizontally; absorbent materials such as kitty litter, pillows, diapers, or other similar material may be useful to absorb spills)
   13. Saline and IV tubing for eye irrigation set-up (special decontamination solutions and neutralizing agents are not recommended except in specific rare circumstances e.g., hydrofluoric acid)
   14. Water (and perhaps soap) are the recommended means of decontaminating victims; extra care needs to be given to victims contaminated with reactive substances; consult your poison control center.
   15. For a dedicated decontamination room, separate exhaust ventilation, adequate ventilation (at least 6 changes per hour), plastic sheeting to cover floor, 2" tape to secure plastic, means of containing contaminated water, and respiratory protective gear for staff who may be in an enclosed space with volatile hazardous materials (any employee required to use a respirator must be medically cleared, fitted and trained)

d. Other Supplies:
   1. Wall suction with disposable collection bag to hook up to gastric tube to remove and isolate toxic vomitus
   2. Extra medical supplies or equipment which could be taken out of service temporarily if contaminated (including crash cart with ambu bags, defibrillator, EKG monitoring equipment, IV stands, etc.)
   3. Inexpensive medical equipment which could be disposed of if contaminated (including stethoscope, blood pressure cuff, etc.)
   4. Tape and rope for marking of perimeters
   5. Plastic sheeting (4 mil) for covering floor or covering entrance to, and floor of, decontamination area for materials with high potential for secondary contamination
   6. 2" tape for securing plastic
   7. Cotton-tipped applicators and stoppered glass containers for swabs of hazardous materials for laboratory analysis, or evidence for later prosecution of the party responsible for the hazmat spill

735 Hospitals

735.1 Hazardous Materials Decontamination

Whenever possible, preliminary decontamination should occur outside the hospital. The following emergency supplies should be stored in an area near the emergency department rear entrance and checked periodically (e.g., quarterly):

a. **Written procedures for handling chemically-contaminated victims**.
b. **Protective clothing for staff**:

1. For most circumstances: Disposable gowns, surgical masks, plain latex gloves (enough for double gloving), shoe covers, splash goggles (at least two pair), aprons, caps. At least some of the gowns, aprons, and shoe covers should be impervious to water.
2. **For heavy chemical or corrosive contamination**: At least 2 Tyvek or Saranex suits and 2 pair unmilled nitrile gloves (be sure to check with Poison Control or Hazmat team to see if they are compatible with the particular hazardous substance involved).

Note: Respiratory protective gear is not generally available and, in addition, should not be used unless it is properly maintained and staff have been properly fitted and trained in its selection and use. Therefore, if inhalation exposure is a risk, decontamination should be done **outside**.

c. Decontamination supplies:

1. Inflatable kiddie pool (large) with foot operated air pump (or other means of collecting contaminated water)
2. Large plastic tarp to place under pool forming an outer containment area
3. 55 gallon plastic trash cans to hold water
4. Mild dishwashing detergent or soap in squeeze bottle
5. Sponges
6. Absorbent pads for washing
7. Nail brush
8. Tent or curtain for privacy
9. Exterior wall water outlet/shower nozzle hooked up to lukewarm (or cold) water supply
10. Metal gurney or morgue table for non-ambulatory patients
11. Plastic bags for double-bagging contaminated clothing (preferably clear).
12. Diking or absorbent material (dikes can be made by taping the edges of a large plastic tarp or sheets or plastic draped over a ladder turned on its side or rope strung horizontally; absorbent materials such as kitty litter, pillows, diapers, or other similar material may be useful to absorb spills)
13. Saline and IV tubing for eye irrigation set-up (special decontamination solutions and neutralizing agents are not recommended except in specific rare circumstances e.g., hydrofluoric acid)
14. Water (and perhaps soap) are the recommended means of decontaminating victims; extra care needs to be given to victims contaminated with reactive substances; consult your poison control center.
15. For a dedicated decontamination room, separate exhaust ventilation, adequate ventilation (at least 6 changes per hour), plastic sheeting to cover floor, 2" tape to secure plastic, means of containing contaminated water, and respiratory protective gear for staff who may be in an enclosed space with volatile hazardous materials (any employee required to use a respirator must be medically cleared, fitted and trained)

d. **Other Supplies**:

1. Wall suction with disposable collection bag to hook up to gastric tube to remove and isolate toxic vomitus
2. Extra medical supplies or equipment which could be taken out of service temporarily if contaminated (including crash cart with ambu bags, defibrillator, EKG monitoring equipment, IV stands, etc.)
3. Inexpensive medical equipment which could be disposed of if contaminated (including stethoscope, blood pressure cuff, etc.)
4. Tape and rope for marking of perimeters
5. Plastic sheeting (4 mil) for covering floor or covering entrance to, and floor of, decontamination area for materials with high potential for secondary contamination
6. 2" tape for securing plastic
7. Cotton-tipped applicators and stoppered glass containers for swabs of hazardous materials for laboratory analysis, or evidence for later prosecution of the party responsible for the hazmat spill

736 Communications

736.1 Basic Communications

736.11 Ambulance Services

a. Portable Radios
One for physician or PA

One for Chief/Rescue Squad Captain
One for each on duty responder
One for First Responder in remote areas
One for backup

b. Base Stations
Hospital/clinic
Dispatch

c. Pagers
One-way voice pagers, one per responder

d. Mobile
Ambulance

736.12 Village Clinics

a. Phone
b. HF-SSB
c. CB

736.13 Air Ambulance

a. Radio with ground medical channels (and marine frequencies in coastal Alaska).

736.14 Optional

a. Cellular phone
b. Fax

737 Pre-Stocked Disaster Supplies

737.1 Level I Communities

a. Backboard, 2
b. Wool blanket, 4
c. Cervical collar, no neck and regular, one each
d. 4" x 4" gauze, 12 per pkg., eight pkg.
e. Butterfly bandage, 25
f. Antimicrobial towel, 10
g. One inch tape, four rolls
h. Two inch tape, two rolls
i. Aluminum blanket, two
j. Triangular bandage, eight
k. Multi-trauma bandage, five
l. Para-med type scissors, one
m. Pencil/pen/write-in-rain notebook, two
n. Triage tags, one pkg.
o. Water, 1000 cc
p. Cardboard splint, 18 inch, two
q. Cardboard splint, 24 inch, two
r. Sam Splint, three
s. Flex bandage/dressing (Kerlix), 6 inch, 24
t. Burn sheet, two
u. Yellow disposable blanket, two
v. Stethoscope, one
w. Blood pressure cuff, one
x. Assorted latex gloves
y. Hypothermia thermometer, one

737.2 Level II, III, IV and V Communities

One of the following Trauma/Command Package of supplies is suitable for treating 30 to 50 injured persons and is portable and inexpensive.

737.21 EMS Trauma Package

a. Board splints (IV arm boards are disposable and already padded), 50
b. Cravats, cut and rolled from large roll of muslin, 100
c. Bleeding control packs, six 4" x 4", and three 4" Klings in a zip-lock sandwich bag, 50
d. BP cuffs/stethoscope, packed together for one rescuer with several patients at secondary triage site, 10
e. Oral pharyngeal airway kits, three
f. ABD pads, 8" x 10", sterile, 100
g. Bandage scissors, ten
h. Extra cardboard port-a-boards, optional

737.22 Command Package

a. Marker flags, 100
b. Letter-sized envelopes, 100
c. Large bulldog clips, two
d. Small bulldog clips, six
e. Resource manual
f. Triage plan
g. Manila envelopes for patient's effects, 50
h. Lined paper pads, 11" x 14", two
i. Receipt books, two
j. Chalk, box
k. Hazardous material books, three
l. Stapler
m. Staples, box
n. Rubber bands, two boxes
o. Zip-lock bags, 12" x 12", box
p. Twine, roll
q. Crayon markers, package
r. Clipboards, 11" x 14"
s. Graph paper, 20" x 20" sheet
t. Pencils and pens, 20 assorted
u. Colored sector tape (red, yellow, green) patient sorting areas, one roll each color
v. Area phone directory, white and yellow pages
w. Triage tags, 100
x. Binoculars, pair

y. Vests, seven (one command officer, one triage officer, three triage team, one safety officer, one transportation officer)

737.3 Level III, IV and V Airports

The supplies listed below will accommodate approximately 100 victims. Ideally, for item z. you should have as many as 25 oxygen set-ups available. However, this may be unrealistic both for cost and storage. The responding ambulances will have additional oxygen.

a. Gauge rolls (Kling, Kerlix), 100
b. Dressing pads (ABD, combine, surgipad, field dressing), 100
c. 4x4 gauze, 100
d. Burn sheets, 25
e. Triangle bandages (cravat), 50
f. Elastic bandages, assorted sizes, 30
g. Cardboard splints, arm, 40
h. Cardboard splints, leg, 40
i. Disposable gloves, boxes (50-100 pairs), 10
j. Eye pad, 50
k. Vaseline gauze, 6
l. Tape, adhesive (1", 2"), 20 each
m. Tape, micropore (1"), 20
n. Bandage scissors, 10
o. Shears, 6
p. Hemostats, 6
q. Tweezer forceps, 2
r. Safety pins, 50
s. Oral airway, infant, 2
t. Oral airway, small 8
u. Oral airway, medium and large, 20 each
v. Pocket masks (blob type, with one way valve), 20
w. Bag valve masks (ambu bag), 10
x. Non-rebreather O_2 masks, 20
y. Nasal cannulas, 20
z. Oxygen bottles, regulators, 10
aa. V-Vac or similar hand suction devices, 15
bb. Laryngoscope: set (handle and blades), 2
cc. Endotracheal tubes (sizes 6.5, 8.0), 4 each
dd. Endotracheal tubes (sizes 7.0, 7.5), 10 each
ee. Endotracheal tubes (sizes 2.0, 3.0, 4.0, 5.0 uncuffed), 1 each
ff. Stylets, 14 Fr, 2
gg. Syringes, 10 cc, 20
hh. KY jelly, tubes, 4
ii. Suction catheters, 10
jj. 60 cc catheter tip syringes, 10
kk. Eye wash solution, bottle, 4
ll. Bulb syringes, 2
mm. IV start kits (tourniquet, ETOH swabs, IV catheters (16, 18 g) tape), 20
nn. IV catheters (extra); sizes 14, 16, 18, 20), 5 each
oo. IV tubing, macro-drip, 50
pp. IV tubing, micro-drip, 10
qq. IV solution, LR or NS, 1000 cc, 50
rr. D_5W, 500 cc, 10
ss. Flashlights, 20
tt. Backboards, 60
uu. Cardboard backboard head stabilizers, 60
vv. Blankets, wool, 100
ww. BP cuffs, 10
xx. Stethoscopes, 20
yy. Heat packs, cold packs, 15 each

738 Remote Areas

738.1 High-Risk Occupation Sites

This is a list of on-site first aid equipment recommended for those industrial sites with more than 25 persons in either a high risk operation or in a location more than 30 minutes from the nearest ambulance service. The minimum level of training recommended for these items is ETT.

738.11 General Equipment

The following equipment should be available in the First Aid Room. *Italicized items* should be available at each remote working site also.

a. Fever thermometer
b. Disposable thermometers, package of 20
c. Low reading (hypothermia) thermometer
d. Blood pressure cuff, adult, large, pediatric
e. Stethoscope
f. Penlight
g. Waterproof flashlight
h. Wool blankets, two or more
i. Pillows, two
j. Space blanket
k. Bed sheets, clean, two
l. Ring cutter
m. Bandaging scissors, pair

738.12 Resuscitation and Shock Management

The following equipment should be available in the First Aid Room. *Italicized items* should be available at each remote working site also. Usage of any of this equipment requires trained responders.

a. Electric suction device with a rechargeable battery, or mechanical equivalent, such as *Vivac*
b. *Oral airways*, a set

c. Bag mask, adult
d. Bag mask, child
e. Oxygen system
f. Pneumatic antishock garment (PASG), adult

738.13 Fractures/Splinting

The following equipment should be available in the First Aid Room. *Italicized items* should be available at each remote working site also.

a. Traction splint
b. Full arm air splint
c. Full leg air splint
d. Rigid cervical collars, set (small, medium, large)
e. Standard backboard w/straps
f. Fiberglass basket/stretcher
g. Stretcher
h. *Bridle harness for hoisting*

738.14 Disposables

The following equipment should be available in the First Aid Room. *Italicized items* should be available at each remote working site also.

a. Emergency OB kit
b. Activated charcoal in suspension
c. Syrup of ipecac
d. *Adhesive tape*, ½", two rolls
e. *Adhesive tape*, 1", two rolls
f. *Trauma dressings*, 10" x 30", two
g. *Sanitary pads*, package of 12
h. *Kerlix*, 4", package of 12
i. *Ace elastic bandages*, 4", six, two
j. *Triangular bandages*, six, two
k. *Gauze pads*, 4" x 4", package
l. *Saran wrap*, package
m. *Cold packs*, package of four
n. *Hot packs*, package of four
o. Eye wash – Normal Saline

738.15 Containers

The following equipment should be available in the First Aid Room. *Italicized items* should be available at each remote working site also.

a. *First responder kit*

740 Prehospital Care Record Forms

This section contains a list of essential uniform prehospital EMS data elements, which should be included in a prehospital form, as well as sample patient care forms.

741 Essential Uniform Prehospital EMS Data Elements

See page

742 Alaska Prehospital Patient Report Form

See page

743 Alaska Medevac Transportation Form

See page

Table 741-1: Essential Uniform Prehospital EMS Data Elements

#	NAME	DEFINITION
1	Incident Address	Address where patient was found, or address to which unit responded
2	Incident City	City or township where patient was found
3	Incident EMS Region	EMS Region where patient was found
4	Incident State	State, territory, province or district where patient was found
5	Location Type	Type of location of incident
6	Date Incident Reported	Date call is first received by PSAP or other designated entity
7	Time Incident Reported	Time call is first received by PSAP or other designated entity
8	Time Dispatch Notified	Time of first connection with EMS dispatch
9	Time Unit Notified	Time response unit is notified by EMS dispatch
10	Time Unit Responding	Time response unit begins physical motion
11	Time Arrival at Scene	Time EMS unit stops physical motion at scene (last place unit or vehicle stops prior to assessing patient)
12	Time Unit Left Scene	Time response unit began physical motion from scene
13	Time Arrival at Destination	Time when patient arrives at destination or transfer point
14	Time Back in Service	Time response unit back in service available for response
15	Lights and Sirens to Scene	The use of lights and sirens to scene
16	Service Type	Type of service requested
17	Incident Number	Unique number for each incident reported to dispatch
18	Response Number	Unique number for each individual response by a response unit to an incident
19	Patient Care Record Number	Unique number for each patient care record (PCR)
20	Agency Unity Number	Number that identifies the agency and unit responding to an incident
21	Vehicle Type	Type of vehicle which responded to incident
22	Crew Member One	Personnel certification/license number for first crew member
23	Crew Member Two	Personnel certification/license number for second crew member
24	Crew Member One Type	Personnel certification/license level of crew member
25	Crew Member Two Type	Personnel certification/license level of crew member
26	Patient Name	Patient name
27	Zip Code of Residence	Zip code of patient’s residence

Table 701-1: Essential Uniform Prehospital EMS Data Elements (continued)

#	NAME	DEFINITION
28	Date of Birth	Patient's date of birth
29	Gender	Gender of patient
30	Race/Ethnicity	Patient's racial and ethnic origin
31	Destination/Transferred to	Reason a transport destination was selected
32	Lights and/or Sirens Used from Scene	Use of lights and/or sirens from the scene
33	Destination Determination	Reason a transport destination was selected
34	Incident/Patient Disposition	End result of EMS response
35	Cause of injury	External cause of injury
36	Provider Impression	Provider's clinical impression which led to the management given to the patient
37	Pre-Existing Condition	Pre-existing medical conditions known to the provider
38	Signs and Symptoms Present	Signs and symptoms reported to or observed by provider
39	Injury Description	Clinical description of injury type and body site
40	Safety Equipment	Safety equipment in use by patient at time of injury
41	Alcohol/Drug Use	Suspected alcohol or drug use by patient
42	Pulse Rate	Patients palpated or auscultated pulse rate expressed in number per minute
43	Respiratory Rate	Patients respiratory rate expressed in number per minute
44	Systolic Blood Pressure	Patients systolic blood pressure
45	Glascow Eye Opening Component	Patients eye opening component of the Glascow coma scale
46	Glascow Verbal Component	Patients verbal component of the Glascow coma scale
47	Glascow Motor Component	Patients motor component of the Glascow coma scale
48	Procedure or Treatment Name	Identification of procedure attempted or performed on patient
49	Medication Name	Medication name

Table 820-1
EMS Community Levels-of-Care

COMMUNITY TYPE	POPULATION	EMS	GENERAL ACCESS
LEVEL I Isolated Village	Usually 50 - 1,000 in immediate community	Community clinic with a CHA or EMT	Limited air or marine highway access to a Level III or higher community; road access exceeds 60 miles
Highway Village	Usually 50 - 1,000 in immediate community	Community clinic with a CHA or EMT	Limited air or marine highway access to a Level III or higher community; year-round, 60 minute or less road access
LEVEL II Isolated Sub-Regional Community or Town	Usually 500 - 3,000 + in immediate community	Community clinic with PA, NP, or physician; health care services provided by public or private sector	Marine highway or daily air access to closest Level III or higher community; air service to Level I communities in area
Highway Sub-Regional Community or Town	Usually 500 - 3,000 + in immediate community	Community clinic with a PA, NP, or physician; health care services provided by public or private sector	Marine highway or daily air access to closest Level III or higher community; year-round 60 minute or less road access
LEVEL III Large Town or Regional Center	Usually 2,000 - 10,000 + in immediate community, providing services to a regional population	Community hospital and physicians; health care service agencies include both public and private	Daily airline service to Level III, IV & V communities; air service to Level I & II communities in area; road or marine highway access all year
LEVEL IV Small City	Usually 10,000 - 100,000 in immediate community, providing services to a larger regional population	Hospitals with a 24 hour staffed ED and full continuum of care; multiple providers of health care and other services including both public and private programs	Daily airline service to Level II, III, IV & V communities; road or marine highway access all year
LEVEL V Urban Center	Usually 100,000 + in immediate community, providing services to a statewide population	Some specialized medical and rehabilitation services for low incidence problems	Daily airline service to Level II, III, IV & V communities; road or marine highway access all year
OTHER AREAS Very Small Communities	25 - 150 in immediate community	Designated area for equipment and patient care with a CHA, ETT or EMT	Limited road, air or marine highway access to a Level III or higher community
Major Highways	Variable	Level II ambulance service every 100 miles & first responder service every 50 miles	Year-round, 60 minute or less ground transportation or air access to a Level III or higher community
Marine Highways	Variable	Safety officer with ETT or EMT training	Helicopter or fixed wing access
At-Risk Sites Schools	Variable	Safety coordinator & at least two ETTs	Air, marine & ground transportation access
High-Risk Work Sites: Remote	Variable	ETT or EMT for every 25 employees	More than one hour from a medical service
High-Risk Work Sites: Nearby	Variable	ETT or EMT for every 50 employees	One hour or less from a medical service

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